

# National VVF Project Nigeria

evaluation report XXVII

2010

state of the art surgery  
evidence based results  
ground breaking research  
peer reviewed science  
complete documentation  
long-term follow-up

**life after vvf**

**kees waaldijk MD PhD**

chief consultant fistula surgeon

sponsored and financed by:  
**waha-international**  
paris



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babbar ruga fistual teaching hospital  
katsina  
nigeria

# **National VVF Project Nigeria**

## **evaluation report XXVII**

**2010**

### Nigeria

Ebonyi State University Teaching Hospital  
ABAKALIKI

Special VVF Center  
B/KEBBI

Faridat Yakubu VVF Hospital  
GUSAU

General Hospitals  
HADEJIA - JAHUN

Laure Fistula Center  
KANO

Babbar Ruga Fistula Hospital  
KATSINA

Federal Medical Center  
NGURU

Maryam Abacha Hospital  
SOKOTO

Kofan Gayan Hospital  
ZARIA

### République du Niger

Centre Hospitalier Départemental  
MARADI

Hôpital National  
NIAMEY

Maternité Tassigui  
TAHOUA

Maternité Centrale  
ZINDER

donation: operating light



who wants to be electrocuted

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**the (surgical) management of the obstetric  
fistula has to start the moment the leaking of  
urine becomes manifest**

**no need to become an outcast**

the immediate management by catheter and/or early closure is  
highly successful and will prevent the woman from becoming an outcast

**the best way to treat the whole patient is  
by closing the fistula**

do not waste time, energy and money on things which make no sense  
concentrate on the most important thing: close the fistula

**previous repairs, scar tissue, vagina  
strictures etc  
do not influence the outcome of surgery**

only surgical principles and surgical techniques with  
the surgeon being the most important

**the real master shows himself in his  
restrictions**

**prevention**

**is it not time to change the strategy**

after 30 years of failed safe motherhood campaigning

which did not bring a single positive result  
due to the arrogance of the aid organizations  
spending a fortune  
on things which make no sense

to an

**evidence-based strategy**

as proven in the industrialized world

to set up

**network**

**125,000 functioning obstetric units  
in Africa**

where within 20-30 min from arrival

a safe cesarean section  
can be secured  
by

professionals

## life after vvf

holistic approach zaria



live infants by cs in four patients after vvf repair

## **executive summary**

the **strength of the program** is that everything is **evidence based** by meticulous documentation, extensive database, prospective research, individual follow-up over years and consequent analysis of the results according to scientific parameters

during the year a total of 2,513 VVF/RVF-repairs were performed in the project making a **grand total of 34,572 repairs**

during the year a total of 18 doctors and 2 nurses attended our training programs making a **grand total of 750 trainees: 347 doctors, 332 nurses/ midwives and 71 other persons**

during the year 6 workshops were executed making a **grand total of 36 workshops**

**scientifically**, at the third **ISOFS** conference in dakar in senegal we participated with 9 presentations

it has to be stressed that these achievements are only due to **teamwork** and the **combined efforts** by all the doctors, nurses and other personnel in all the centers

having been 3 years without a full sponsor for the running costs not covered by the government we are very happy that from 2010 onwards we found a new sponsor in **waha-international**; this collaboration will be structured by official **memoranda of understanding** with the federal and with the individual state governments

a new operating theater complex in katsina was donated by the **service to humanity foundation**

a **holistic approach** is evidence-based possible as shown in kofan gayan hospital in kaduna state

some remarks:

there is a relation between obesity and cs-related fistulas including ureter fistulas; since the cs is on the rise as is obesity in the developing world there will be a sharp increase in these fistulas; however, do **not** blame the surgeons but first ensure/provide them with a **professional** environment

though i am very happy that the isofs-figo-rcog training manual has been finalized, there still remain some hard questions about the implementation

in our struggle against the obstetric fistula we need quality (responsibility of the fistula surgeons as united within **isofs** since they have the professional expertise) and quantity (responsibility of the major aid organizations since they have the financial resources)

## **preoperative preparation**



drinking

# evaluation report XXVII

## introduction

the obstetric fistula is as old as mankind and constitutes a social disaster of the highest order; due to the continuous urine leakage with offensive smell these patients are ostracized from their own community if nothing is done and lose all dignity, as a woman and as a human being, with progressive downgrading medically, socially, emotionally and mentally the variety of the complex trauma of the obstetric fistula is enormous: from a minute fistula with minimal tissue loss to a cloaca in an empty pelvis with extensive intravaginal lesions and (sub)total loss of all the intrapelvic tissues, extravaginal lesions, urine-induced lesions, neurologic lesions and systemic lesions

**the only rehabilitation** into society is by **successful closure** of the fistula; however, this is not simple considering the extent and the immense variety of the trauma

though prevention of the obstetric fistula is not possible for another century, **prevention of the social disaster** is very well feasible by the **immediate management** by catheter and/or early closure; **no need to become an outcast**

this VVF Project aims to have an impact by providing a VVF-repair service, by establishing VVF centers, by training all kinds of doctors, nurses and paramedical personnel and by providing training materials with the emphasis on keeping it simple, safe, effective, feasible, sustainable and payable under African conditions

## philosophy of the project

to provide a professional service concentrating upon the immediate (surgical) management of the obstetric fistula patient

to bring the service towards the patients which means multiple "small" repair centers within their own community throughout Africa and not a single white elephant in the capital

to work for or in close collaboration with the government in order to have an impact upon the obstetric fistula as a major public health problem

to ensure optimal comprehensive care: repairs by the surgeon and rehabilitation if needed by the social workers in close cooperation

to concentrate on the repairable fistulas and especially on the immediate management as a priority considering the scarcity of human resources, finances and available infrastructure

to make a clear statement during the whole management process about further surgical interventions; it does not make sense to operate forever on the incurable patients

to demarcate the responsibilities: once the surgeon has done his job <closure of the fistula to the best of his knowledge, conscience and expertise> in the end it is the patient herself who is responsible for her life; the surgeon is just the surgeon, nothing more; and the surgery alone consumes all his energy

## long-term objectives

to establish a lasting VVF service with ultimately the total eradication of the obstetric fistula, first in Nigeria but later on also in the rest of Africa and the whole world

to keep the existing expertise available for present and future fistula surgeons

## short-term objectives

to further upgrade the repair and training services in the existing centers and to start new centers; masterplan: to establish a VVF-repair center in each of the 36 states of Nigeria and to have a VVF-training center in each of the 6 geopolitical zones of Nigeria; with a population of at least 170 million people

to train doctors, nurses and other health personnel in the complicated (surgical) management of the obstetric fistula

to produce training materials and surgical handbooks with in-depth description of anatomic tissue losses, classification of vvf and rvf, description of continence mechanisms, immediate management, step-by-step operation techniques of fistula and (postrepair) intrinsic/stress incontinence etc

to conduct clinical scientific research, to establish a comprehensive database and to prepare evidence-based scientific articles

## **achievements**

### **individual VVF-repair centers**

during the period 1984-2010 we were instrumental in establishing and maintaining **9 vvf-repair centers in nigeria and 4 in république due niger; and in establishing 2 functioning vvf-training centers in nigeria**

## **activities**

### **surgery**

over the year a total of 2,513 procedures were performed in the 12 different centers making a **grand total of 34,572 operations: 31,335 VVF-repairs and 3,237 RVF-repairs**

### **postgraduate training**

over the year a total of 18 doctors and 2 nurses/midwives were trained making a **grand total of 730 persons: 347 doctors, 332 nurses and 71 other persons**

### **workshops**

the consultant surgeon + team participated in 6 workshops in Abakaliki, Nguru and Sokoto making a **grand total of 36 workshops**

### **research**

this is a continuous process; the intention was, is and will be to make complicated things simple, safe, effective, feasible, sustainable and payable under African conditions  
... and we were able to develop **evidence-based solutions for each and every problem**  
our best contribution is the **immediate management** by catheter and/or early closure preventing the woman from becoming an outcast

### **database**

a comprehensive database has been developed where the chief consultant has entered his personal obstetric fistula experience consecutively from the very first to the last patient with up to 256 parameters per patient

### **scientific work**

we participated in the 3rd ISOFS conference 2009 in Nairobi in Kenya with 9 presentations

### **state-of-the-art surgery**

each fistula needs its own specific customized approach as based on a careful assessment of the qualitative and quantitative amount of tissue loss: a combination of science and art based upon a scientific classification state-of-art operation principles and techniques have been developed for each type with **evidence-based prognosis** as to healing and continence

### **export of expertise to the industrialized world**

since the chief consultant surgeon is in the unique position to study the anatomic tissue loss of the pelvis floor structures and the urine/stool continence mechanism in all its stages, it is high time to export his insight and evidence-based experience to the industrialized world especially about topics such as genuine urine stress incontinence and sphincter ani rupture as well as 3° total cervix prolapse

### **funding**

basically the project is funded by the Federal Government and by the individual State Governments but this is not sufficient  
further support came from several organizations like service to humanity foundation, usaid-acquire, mdg, family care, asahom and dutch government  
luckily after 3 years of struggling we found a new major sponsor for the running costs from 2010 onward in **waha-international**

**new nation-wide development**

the Federal Ministry of Health, the Federal Ministry of Women Affairs and the individual State Governments are becoming more and more involved in the project

**new world-wide development**

our own International **S**ociety of **O**stetric **F**istula **S**urgeons held its third ISOFS conference in December 2010 in Dakar in Senegal, and it was a huge success

**strength of the project**

its **rare meticulous evidence-based complete documentation** by individual electronic systematic examination and operation reports, electronic database with almost 4,000,000 entries, real prospective research, more than 150,000 digital and other photographs, some 50 hours of digital video takes of operation techniques, long-term follow-up over years, real scientific classification and 27 annual reports etc etc **for the whole world to see**

**conclusion**

though there is continuous improvement in the quantity and quality of this project in terms of service, training and research there is a long and difficult road in front of us

# fistula surgery 1984-2010

	ebonyi		jigawa		kaduna		kano		katsina		kebbi		sokoto		zamfara		yobe		rép niger		
	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	VVF/RVF	total
1984	-	-	-	-	-	-	83	6	-	-	-	-	-	-	-	-	-	-	-	-	89
1985	-	-	-	-	-	-	196	20	-	-	-	-	-	-	-	-	-	-	-	-	216
1986	-	-	-	-	-	-	260	18	-	-	-	-	-	-	-	-	-	-	-	-	278
1987	-	-	-	-	-	-	318	7	-	-	-	-	-	-	-	-	-	-	-	-	325
1988	-	-	-	-	-	-	353	31	-	-	-	-	-	-	-	-	-	-	-	-	384
1989	-	-	-	-	-	-	464	21	-	-	-	-	-	-	-	-	-	-	-	-	485
1990	-	-	-	-	222	25	416	29	-	-	-	-	-	-	-	-	-	-	-	-	692
1991	-	-	-	-	248	17	195	4	-	-	-	-	-	-	-	-	-	-	-	-	464
1992	-	-	-	-	348	27	529	34	-	-	-	-	-	-	-	-	-	-	-	-	938
1993	-	-	-	-	416	35	488	62	-	-	-	-	-	-	-	-	-	-	-	-	1,001
1994	-	-	-	-	373	43	496	45	-	42	-	-	-	-	-	-	-	-	-	-	999
1995	-	-	-	-	373	51	537	51	-	161	11	-	-	-	-	-	-	-	-	-	1,184
1996	-	86	-	-	311	37	562	60	41	-	98	5	-	-	-	-	66	2	-	-	1,268
1997	-	211	4	-	295	38	513	55	107	2	181	14	-	-	-	-	33	2	-	-	1,455
1998	-	185	5	42	4	278	28	416	60	37	4	288	34	30	6	-	43	4	-	-	1,464
1999	-	30	3	37	3	280	36	441	62	80	5	238	12	64	3	-	49	2	-	-	1,345
2000	-	204	7	102	7	283	41	420	60	108	4	134	16	102	5	-	69	7	-	-	1,569
2001	-	320	27	80	1	415	41	515	55	98	4	157	9	65	5	-	74	5	-	-	1,871
2002	-	383	26	44	2	464	49	453	41	113	3	144	7	42	3	-	82	3	-	-	1,859
2003	48	5	245	15	39	1	376	52	475	51	96	4	151	7	35	4	-	56	3	-	1,663
2004	24	2	159	17	59	5	410	33	496	64	65	2	119	6	22	-	-	115	8	-	1,606
2005	12	-	117	9	31	4	507	39	525	47	208	5	303	22	145	3	-	79	6	-	2,062
2006	10	2	5	-	65	19	368	91	508	83	156	5	176	17	147	2	-	161	8	-	1,823
2007	11	1	61	3	114	4	510	97	602	117	170	6	90	5	166	2	-	150	5	-	2,114
2008	75	3	83	5	146	8	555	59	584	89	168	7	159	7	175	3	37	4	164	15	2,346
2009	180	14	225	7	80	5	538	195	390	198	172	5	90	5	65	1	23	6	175	12	2,386
2010	255	16	391	25	71	6	509	51	484	83	156	4	174	14	40	1	46	3	173	11	2,513
<b>total</b>	<b>615 43</b>	<b>2,705 153</b>	<b>910 69</b>	<b>8,079 1,085</b>	<b>11,719 1,453</b>	<b>1,775 60</b>	<b>2,705 191</b>	<b>1,098 38</b>	<b>106 13</b>	<b>1,489 93</b>	<b>34,399</b>										

**total VVF-repairs** and related operations:      **31,201** + in workshops 134 = **31,335**

**total RVF-repairs** and related operations:      **3,198** + in workshops 39 = **3,237**

**grand total    34,572**

success rate at VVF closure:    90% per operation      at early closure: 95% per operation

success rate at RVF closure:    85% per operation

wound infection rate:                      < 0.2%                      postoperative mortality rate:    < 0.2%

**final success rate** (after one or more operations):                      > 97%

**final severe incontinence rate** after successful closure:                      2-3%

**operations chief consultant 1984-2010**

	<b>VVF</b>	<b>RVF</b>	<b>total</b>
<b>Nigeria</b>			
ebonyi	73	17	90
jigawa	27	4	31
kaduna	534	96	630
kano	5,582	906	6,488
katsina	9,349	1,363	10,712
kebbi	209	31	240
sokoto	1,128	197	1,325
yobe	81	16	97
zamfara	202	19	221
<b>Rép Niger</b>			
maradi	107	13	120
niamey	103	13	116
tahoua	15	3	18
zinder	232	25	257
<b>Ethiopia</b>			
addis ababa	27	20	47
yirgalem	5		5
<b>Kenya</b>			
machakos	13	2	15
<b>Tanzania</b>			
dar es salaam	51	7	58
mwanza	14	2	16
<b>Burkina Faso</b>			
dori	18	3	21
<b>Holland</b>	6	2	8
<b>total</b>	<b>17,776</b>	<b>2,739</b>	<b>20,515</b>

## **obstetric fistula training 1989-2010**

**a grand total of 750** doctors, nurses/midwives, other highly educated persons and paramedical staff were trained/attended one of our training programs:

a total of **347 doctors**

a total of **332 nurses/midwives**

a total of **4 other academic persons**

a total of **7 medical students**

a total of **20 paramedical persons**

a total of **40 social workers**

in sharp contrast with many things, if one wants to learn the **science and noble art of obstetric fistula surgery** this cannot be done in the USA but one has to come to Africa where the action is together with the real expertise in the hands and minds of the few dedicated fistula surgeons

though the majority of the trainees come from Nigeria and other parts of Africa, we have them also from USA, Europe, Asia and Australia; so from all the 5 continents

however, the training poses an enormous stress upon the trainers; see **logbook training february-march 2010**

due to vocal statements by verbal surgeons and political statements by the major aid organizations there is a lot of misunderstanding such as the obstetric fistula can be cured by a simple operation and rapid hands on training for a short period

however, the evidence-based practice shows something completely different; see **fistulas for beginners**

some even propagate training of non-doctors or even non-medical persons in the very complicated obstetric fistula surgery

however, they do not believe in their own propaganda since I have never seen a non-doctor and/or non-medical “fistula surgeon” been appointed as chief medical director of their hospital (with all the financial benefits of the job); this practice is unfair to the poor patients and unfair to these “fistula surgeons”; actually an abuse of both

the main question is what exactly do we want: **??quality or quantity??**

we are happy that the isofs-figo-rcog training manual has been finalized

however, who is going to implement it and where; see **comments on this manual** where again the enormous stress upon the trainer is highlighted

## performance of trainees      1984-2010

Dr Said Ahmed	5,000 repairs
Dr Immam Amir	3,600 repairs
Dr Kabiru Abubakar	3,000 repairs
Dr Marietta Mahendeka	2,400 repairs
Dr Halliru Idris	2,000 repairs
Dr Hassan Wara	1,100 repairs
Dr Khisa Wakasiaka	1,000 repairs
Dr Lucien Djangnikpo	900 repairs
Dr Abdulrasheed Yusuf	750 repairs
Dr Zubairu Iliyasu	750 repairs
Dr Lawal al Moustapha	750 repairs
Dr Abdoulaye Idrissa	750 repairs
Dr Julius KIIRU	700 repairs
Dr Sa'ad Idris	700 repairs
Dr Idris Abubakar	600 repairs
Dr Fred Kirya	600 repairs
Dr Aliyu Shettima	500 repairs
Dr Meryl Nicol	400 repairs
Dr Moses Adeoye	400 repairs
Dr Odong Emintone	450 repairs
Dr Jabir Mohammed	300 repairs
Dr Dantani Danladi	350 repairs
Dr Aminu Safana	150 repairs
Dr Isah Shafi'i	150 repairs
other trainees:	no data available

## **training module**

**evidence-based as practiced in the national vvf project nigeria**

### **first**

selection of an **obstetric fistula management team** consisting of a doctor, an operation theatre nurse, an anesthesia nurse and two pre- and postoperative nurses who are interested and willing to provide a service for the obstetric fistula patients

### **second**

training of the complete team in an **established obstetric fistula training center** with a high turn-over of patients and a high number of repairs  
for the doctor 6-8 weeks initially  
for the nurses 4 weeks

### **third**

organizing a 5-day workshop to operate a large number of patients in combination with lectures as co-facilitated by the consultant trainer + team for advocacy\_publicity that something can be done and to start the obstetric fistula service in that area

### **fourth**

the team starts working on its own with the simple fistulas which they must be able to handle themselves **confidently** after their initial training

### **fifth**

the consultant trainer + team come from time to time for **on the job training** and to handle the more complicated fistulas and to select more staff for training

### **sixth**

after 50-100 personal repairs, the doctor should come for advanced training to the obstetric fistula training center for 4-6 weeks in order to boost his expertise

### **seventh**

the doctor continues his own surgical program and the consultant trainer + team come from time to time for further on the job training, to assess the service and to handle the difficult fistulas

### **eight**

at any time the doctor comes for further training of 2-4 weeks whenever he thinks he needs more training

### **ninth**

after 350-400 repairs and if feasible and if there is a need, the doctor should come to the training center for further **advanced training** to become a **future trainer**

### **tenth**

at any time, be (s)he a doctor or already a trainer, whenever there is a need, (s)he should appeal and come for further training to the established training center

**workshops** have low value for the initial training but high value for (more) experienced fistula surgeons on specific topics such as postrepair incontinence and definitely value in advocacy and helping large numbers of patients within a short time.

# **fistulas for beginners**

## **objective characteristics and setting standards**

### **as based on evidence**

kees waaldijk MD PhD

#### **abstract**

due to vocal statements by verbal surgeons in the industrialized world and political statements by the major aid organizations, there is a lot of misunderstanding about obstetric fistula surgery and training such as the patient can be cured by a simple operation and beginners need rapid hands-on training for a short period

however, **there are no simple fistulas** considering the complex trauma of the obstetric fistula and the enormous variety in tissue loss; it only may look simple in the hands of the few experienced fistula surgeons

still one has to start somewhere and there are vesicovaginal fistulas suitable for beginners as based on objective findings as to size, location, tissue quality, mobility of fistula/tissue/cervix, width of pubic arch, depth of vagina, concomitant rectovaginal fistula/sphincter ani rupture, previous repairs etc; all the characteristics of a small type IIAa fistula are outlined in order to help trainers and trainees

second, the first priority in training is to teach and demonstrate the anatomy of the pelvis floor, the obstetric pressure gradient within the pelvis, the variety in tissue loss, a systematic examination of these lesions, a classification as based on the quantitative/qualitative amount of tissue loss and the different solutions as customized to that specific fistula

only if the trainer and trainee have full understanding of all the theoretical/practical aspects, then the last thing is hands-on training under direct supervision according to the basic principles of general, urologic, gynecologic, colorectal, septic and especially reconstructive surgery to reconstruct the functional anatomy all in order to restore the normal physiology; this is not something for inexperienced surgeons

out of the 10,529 patients operated during 1983-2010 in the 4 centers katsina, kano, zaria and nguru where there is reliable follow-up till at least 5-6 months post operatively, only 1,236 (12%) fulfilled these criteria and were operated by the author and his trainees with the following results:

final healing in 1,230 (99.5%) as 1,221 (98.8%) healed at first attempt and another 9 at second attempt; 3 patients had a ureter fistula as well which was reimplanted successfully at separate attempt and 4 patients did not report for 2nd attempt

out of the 1,230 patients with a healed fistula 1,223 were completely continent whilst only 7 (0.5%) had persistent postrepair incontinence but they did not report for incontinence surgery

#### **introduction**

there is a lot of debate about obstetric fistula surgery and training most of it by verbal surgeons in the industrialized countries with no or little personal experience and by the major organizations who use it for political reasons and for fund raising

this all resulted in many wrong assumptions and instructions without any evidence such as early-age delivery being cause of obstetric fistula, rapid intervention hands-on training without proper theoretical instruction and trying to come up with all sorts of classification etc whilst stressing the need for evidence based results

after 28 years of obstetric fistula surgery with systematic 21,000 repairs with evidence-based long-term follow-up including appropriate operation reports and database of more than 250 parameters per patient, systematic research and training of some 350 doctors in one form or the other and having set up 14 vvf-repair centers and 2 training centers, it is time for the author to set certain standards for classification, operation techniques, research and training

there are no simple fistulas since obstetric fistula surgery is complicated reconstructive surgery of pressure necrotic tissue loss in order to reconstruct the functional anatomy in an enormous variety of quantitative and qualitative amounts of pressure necrotic tissue loss; it only may look simple in the hands of the few highly experienced fistula surgeons

and it is the wrong mentality to have “hands on” training without understanding the complex trauma of the obstetric fistula; where in the industrialized world is this being practiced?; and why should there be different standards for the developing world?

however, surgeons have to start somewhere in getting their experience in the science and noble art of obstetric fistula surgery

so the first part, like in any surgical training, is teaching the pelvic floor anatomy like the importance of the pubocervical fascia, the urine and stool continence mechanism in the female, the position of arcus tendineus fasciae and arcus tendineus of levator ani muscles, the function and anatomy of the pelvic floor structures in 3-dimensional proportions, classification, physiologic wound healing processes

the second part is to demonstrate the enormous variety of the complex obstetric fistula trauma in the patient and explain the principles as based on the findings in reconstruction of the functional anatomy since and the fistula has to heal and the physiology has to be restored resulting in continence

the third part is for the trainees to analyse and determine themselves the quantitative and qualitative amount of tissue loss due to pressure necrosis and to make up their mind how to deal with these

the very last part is the hand-on surgical training where they can practice their own surgical skills though under strict supervision

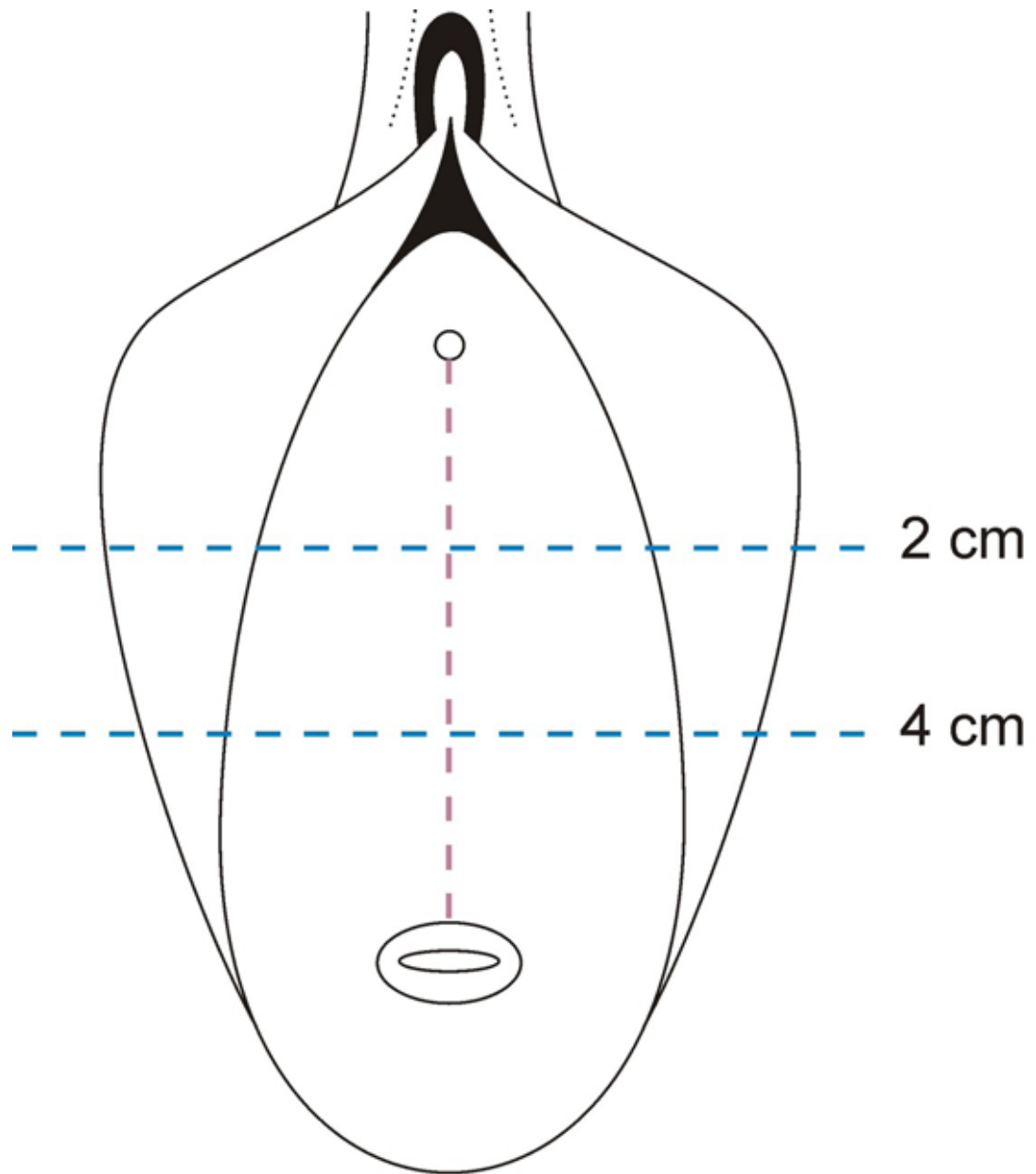
### **objective criteria**

based upon an extensive experience of more than 21,000 repairs with excellent evidence-based results in closure of the fistula after one or more operations in more than 98% with severe incontinence in only 2-3% there are some fistulas which are suitable for beginners; the objective characteristics of which are outlined in table I with drawings in fig 1 and 2

**table I**  
**characteristics of fistulas for beginners**

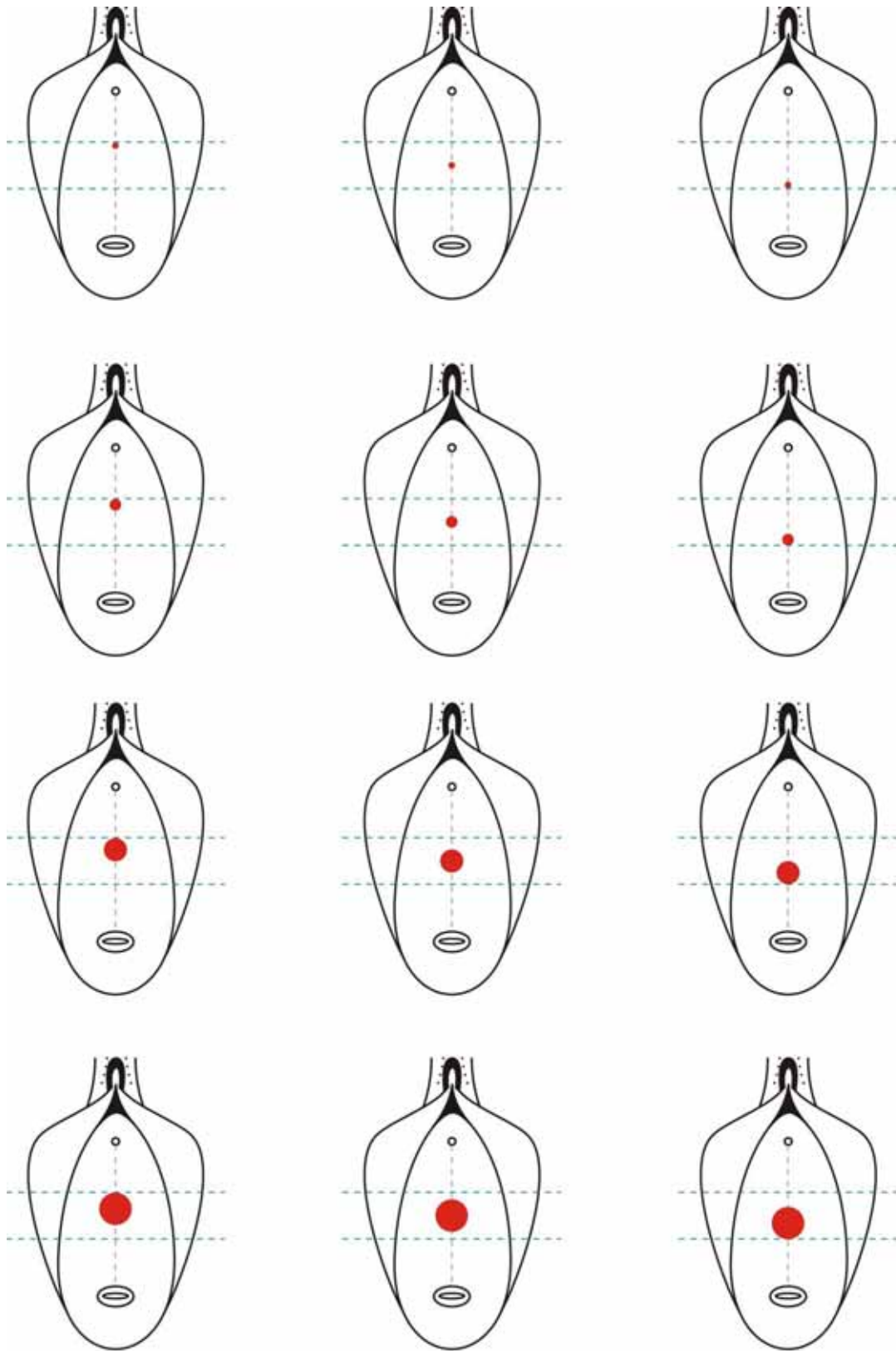
size:	0.2-1.5 cm
location:	midline
distance from euo:	2-4 cm
classification	small type <b>IIAa</b>
ruga folds:	intact
mobility:	good mobility of fistula, tissues and cervix
pubic arch	≥ 85°
vagina depth	≥ 10 cm
previous operation	no contraindication as long as no major scarring and no mutilation
rectovaginal fistula	no contraindication
no severe obesity	obesity makes any operation complicated

**fig 1 location of fistula**



**fistula for beginner**

fig 2 several possibilities



fistulas for beginner

#### size

fistulas < 0.2 cm are difficult to handle and need special insight and operation principles

#### location

fistulas not in the midline are difficult to handle since instrument handling and tissue handling is complicated

#### distance from euo

any proximal fistula is difficult (instrument handling) and if it is too distal the delicate urethra (main continence structure) may be traumatized

#### classification

small type **IIAa** fistulas where **II** means involving the urine continence mechanism, **A** no (sub)total urethra involvement and **a** no circumferential defect

#### ruga folds

when the ruga folds are not intact there is far more trauma than anticipated at first sight and one has to determine exactly the amount of tissue loss

#### mobility

if mobility is poor then mobilization of tissue and tension-free closure may be compromised or even impossible; even after closure there may be traction upon the repair, such as. when a retracted cervix (after cesarean section) is pulling on the repair when the patient is coughing

#### pubic arch

if the pubic arch is < 85° then access may be poor which would make the access poor and as such the operation more complicated

#### vagina depth

if the vagina depth is < 10 cm there is already substantial tissue loss

#### previous operation

if operated by expert surgeon there is almost no scar tissue, however, if operated by a surgeon without expertise there may be excessive scar tissue and mutilation

#### rectovaginal fistula

a rectovaginal fistula does not interfere with the operation technique or healing; a sphincter ani rupture makes the access even better

however, beginners should not combine the vvf and rvf in one session but concentrate totally on one at a time

#### severe obesity

severe obesity makes any operation complicated; if so the patient should lose weight first before she can be operated

### **preoperative preparation**

the normal preoperative preparation should be followed like in any other operation; special for the vvf is abundant preoperative oral fluid intake until the spinal anesthesia which will clean the fistula, bladder and urine and hydrate the patient so that spinal anesthesia becomes safe, ureters can be identified and the occurrence of catheter blockage is minimal and to ensure patient compliance

### **operation technique**

under spinal anesthesia and in the (exaggerated) lithotomy position a proper examination is performed whereby the above-named checklist is followed; then the surgeon should ask himself if he is able to handle this fistula competently

a liberal use should be made of episiotomy to improve the accessibility to the operation field

an incision is made at the fistula edge with bilateral transverse extension; then minimal sharp dissection of the anterior vagina wall from the pubocervical fascia (with adherent bladder/urethra), identification of the pubocervical fascia, a transverse closure of the pubocervical fascia (with adherent bladder/urethra) is made by a single layer of inverting polyglycolic acid; the patient is asked to cough (with urine in the bladder) to check for urine leakage thru suture line or urine thru euo  
 a foley catheter ch 18 is inserted and it is checked if urine flows thru the catheter which means 3 things; catheter is in the bladder, at least one ureter is functioning and the patient is not in shock  
 the bladder capacity is estimated and the urethra length is measured in mm  
 the anterior vagina wall is only adapted with 2x everting nylon sutures according to the principles of septic surgery  
 the episiotomy is closed, and secure check made of the hemostasis; as routine a vagina pack is not inserting unless there should be diffuse oozing which cannot be controlled otherwise

### **postoperative care**

intensive care is normally only for 12-24 hours with liberal use of analgetics; no morphine or morphine derivatives since these interfere with breathing  
 the following morning the patients have to be mobilized like in any other operation; besides good for their general health it is also good for prevention or treatment of contractures  
 abundant fluid intake for as long as there is foley catheter inserted which is left in for a minimum period of 14 days; if nonabsorbable sutures have been used for adaptation of the anterior vagina wall these are removed 1 week after catheter removal  
 upon catheter removal the patients is instructed to continue abundant oral fluid intake and to urinate frequently, to refrain from sex for 4-6 months, to come for regular follow-up up till 6 months postoperatively, to report when 3 month pregnant and to go immediately when labor pains start to a hospital at subsequent deliveries  
 during the recovery phase all the patients are attending rehabilitation courses in special centers like literacy class, making soap, sewing etc

### **results**

out of 10,529 patients operated the period 2008-2010 in katsina, kano, zaria and nguru where there are reliable follow-up data, only 1,236 (12%) fulfilled the above-outlined criteria  
 the evidence-based postoperative results have been analyzed in table II.

**table II**

#### **results in 1,237 patients operated during the period 1983-2010**

healed first attempt	1,221 (98.8%)
healed second attempt	9
whilst 4 did not report for another repair	
postrepair continence surgery	4
all totally continent	
healed final outcome	1,230 (99.5%)
persistent incontinence only 7 (0.5%)	
however, they did not report for incontinence surgery	
mortality	2 (< 0.2%)
native medicine 1; cerebrospinal meningitis 1	

### **short- and long-term follow-up**

3 patients had also a concomitant ureter fistula; a vaginal implantation was performed in 2 and an abdominal implantation in 1, all in another operation session, with total cure of the patient

10 patients developed a recurrence due to early sex; one patient refused operation and the other 9 were cured after another repair

only 4 out of the 11 patients with severe postrepair incontinence presented for incontinence surgery and were cured

1 patient developed a uv-stricture and was cured by dilatation/urethrotomy; 1 patient developed a bladder stone which were removed with cure of the patient

259 patients (21%) reported back whilst pregnant or after subsequent delivery; 56 had developed a 2nd obstetric fistula and were all cured after repair; 7 developed a 3rd obstetric fistula and were cured by repair; and 1 patient developed a 4th obstetric fistula cured by repair

### **discussion**

all the operations have been performed by one surgeon and the trainees under his personal strict supervision under similar conditions in the 4 centers where there is reliable evidence-based postoperative follow-up till at least 6 month postoperatively; with evidence-based long-term follow-up over years; the patients operated by the trainees were all personally selected by the surgeon in a prospective manner

since 2005 at operation end the results are prospectively predicted at 5% range from 5% to 95% as to healing and as to continence and for objective reasons written down in the operation report and entered into the database; the results were conform the prospective predictions

an electronic relevant operation report is made of every patient including a drawing of the fistula and the other findings of the complex obstetric fistula trauma, electronic photographic documentation is performed before and at operation end, the follow-ups are written down on the operation report and all the data (more than 250 parameters per patient) are entered into an extensive database; this unique documentation is hard to find elsewhere, especially the prospective predictions as to healing and as to continence of each operation

### **references**

k waaldijk: obstetric fistula training; guidelines; presented at the unfpa meeting on training april 2005, niamey; reprint 2010, waha-international, paris

k waaldijk: obstetric fistula surgery; art and science; basics, 2008; reprint 2010, waha-international, paris

first edition

december 2010

# **National VVF Project Nigeria**

Babbar Ruga Fistula Teaching Hospital  
Katsina

## **logbook training february-march 2010**

### **location of training**

katsina, kano, nguru, zaria, sokoto, abuja and bauchi

### **time spent on training/teaching/travelling + number of procedures**

every single day from **02.02.10 thru 22.03.10** from 6.45 hr in the morning thru at least 20.30 hr at night I had one or more trainees around me: driving to the hospital, eating at night and driving back to the hotel

**50 full days** à 14 hr

**700 hr of training**

**225 procedures: 170 vvf-repairs 21 rvf-repairs 34 catheter treatments**

**114 extra consultancies** in pre- and postoperative **problem** patients

**some 8,000 km** travelling by car from center to center to center and from hotel to hotel

### **state-of-the-art type of training**

individual private training customized to each individual trainee at his/her own level of experience

### **trainees**

continuing training in katsina of young nigerian doctor (with 50 personal repairs) in preparation for consultancy training in surgery for eventual ?future project leader?

continuing on-the-job training in kano of very experienced fistula surgeon with over 3,000 personal repairs; this doctor has been encouraged and is planning to undergo further training to become consultant gynaecologist in south africa; ?future project leader?

continuing on-the-job training in kano of very experienced fistula surgeon with over 2,500 personal repairs; this doctor has been encouraged and has been accepted to undergo further training to become consultant surgeon in belarus; ?future project leader?

from 02.02.10 to 22.02.10 very experienced german general/endoscopic surgeon/traumatologist trainer (retired as Oberarzt from Free University in Berlin who came for third time at advanced-trainer level with 600 personal repairs) who has trained already several doctors in the principles of obstetric fistula surgery

from 20..02.10 to 05.03.10 consultant nigerian consultant gynaecologist as introduction to the obstetric fistula (management)

from 21.02.10 to 13.03.10 kenyan consultant gynaecologist (with 150 personal repairs)

from 21.02.10 to 13.02.10 kenyan consultant gynaecologist (with 5 personal repairs)

from 22.02.10 to 01.03.10 german senior consultant gynaecologist as Oberarzt from University in Jena and specialized in urogynecology and pelvic floor reconstruction as introduction to the obstetric fistula (management)

from 28.02.10 to 22.03.10 experienced colorectal surgeon from Belgium with PhD degree in the sphincter ani rupture (who came for the second time at advanced level with 150+ personal repairs)

## lectures

history taking, importance of documentation, location of obstetric trauma in correlation with tissue loss of the pelvic floor, classification of urine/stool fistulas as based on quantitative and qualitative involvement of closing/continence mechanism, the urine/stool closing/continence mechanism, the mechanism(s) of urine incontinence in the female, the physiology of wound healing, the immediate management by catheter and/or early closure, the theoretical background and practical aspects of the different operation principles in the different types, the importance of individual operation reports with prognosis as to healing and to continence, the importance of database in evidence-based medicine, grading of urine incontinence I-III, natural forces and how to place an incision etc etc

## step-by-step demonstration of state-of-the-art operation techniques

with pointing out the inherent obstetric trauma for each individual fistula: first tissue loss, then theoretic aspects of reconstruction of functional anatomy, then how to proceed and then prediction of results as based on findings and operation followed by questions and answers and in-depth explanation

kano

02.02.10      3/4 circumferential repair + pcf refixation in type **IIAb** urine fistula combined with repair of type **Ia** stool fistula, repair of type **IIAa** fistula, anorectum, sphincter ani etc repair of type **IIB** stool fistula and catheter treatment of type **IIAa** fistula  
wardround                      3-hr drive to katsina in the afternoon

03.02,10 circumferential repair + pcf refixation of type **IIAb** fistula, complicated CS-VCVF-repair of type **I** fistula, circumferential repair of type **IIBb** urine fistula combined with repair of type **Ib** stool fistula, circumferential repair of type **IIAb** urine firula combined with repair of type **Ia** stool fistula, 4/5 circumferential repair + pcf refixation of extensive **IIAb** urine fistula with spontaneous healing of type **Ia** stool fistula, catheter treatment of type **I** fistula, catheter treatment of type **IIAa** fistula, catheter treatment of postpartum atonic bladder, catheter treatment of **IIAa** fistula with stool/flatus incontinence and negative anal reflex/saddle anesthesia due to pudendal nerve trauma  
wardround                      theoretic lectures/discussions at night

[illegible]

05.02.10 repair of **mutilated** type I cs-vcvf in obese patient, **complicated** "repair" of type I cs-tah-vcvf in small pocket fixed to R isciac spine operated 1x (**mutilation upon mutilation**), 4/5 circumferential repair + pcf refixation of type **IIAb** fistula leaking 45 years, circumferential repair + pcf refixation in **second** type **IIAb** fistula

wardround                      theoretic lectures/discussions at night

06.02.10      ureters + circumferential repair + pcf refixation in **extensive** type **IIAb**  
 repair with stool/flatus incontinence/saddle anesthesia due to pudendal  
 nerve trauma, **last resort final** distal euo fixation for post **IIBb** total  
 incontinence combined with RVF-“repair”, pcf fixation of **second** total  
 post **IIAb** incontinence leakage after multiple repairs  
 pre-and postoperative consultancy of 15 problem patients  
 wardround                      theoretic lectures/discussions at night

07.02.10 urethralization + euo-rhaphy + pcf fixation in **second** post **IIAa** delivery  
total urine incontinence leakage, fixation onto L pubic/iliac bone  
periost/atf/atl/iom/lam for 3° cervix prolapse for 25 years  
wardround 3-hr drive to kano in the afternoon

08.02.10 circumferential repair + pcf refixation of type **IIAb** fistula, ureters, repair + pcf fixation in type **IIAb** fistula, anorectum, sphincter ani etc repair of type **IIb** stool fistula  
wardround 4-hr drive to nguru in the afternoon

nguru

09.02.10 repair and pcf fixation in type **IIAa** fistula, circumferential repair + pcf refixation in type **IIAb** fistula without major atf/atl+pc-ilcm loss, repair of type **IIAa** fistula, repair + pcf fixation of **mutilated** type **IIAb** fistula operated 1x, repair of type **I** vcvf in obese patient, repair of multiple type **IIAa + I** fistulas in one go, **last resort** "continent urethra/avw reconstruction" in **mutilated "inoperable"** type **IIBa** fistula operated 1x, wardround  
theoretic lectures/discussion at night

10.02.10 repair + pcf fixation to neutralize traction in type **IIAa** fistula with spontaneous healing of type **la** stool fistula, **complicated** repair of type **I** cs.tah vcvf, 4/5 circumferential repair + pcf refixation of type **IIAb** fistula, repair of type **I** fistula (delivered 3 live children with fistula), circumferential bladder fixation as **first stage** in **mutilated extensive** type **IIBb** fistula + 3° cervix prolapse operated 3x, 4/5 circumferential repair + pcf refixation in type **IIAb** fistula, repair + pcf fixation in type **IIAa** fistula with **b** characteristics, anorectum, sphincter ani etc repair of type **Ilb** stool fistula  
pre- and postoperative consultancy in 6 problem patients  
wardround  
theoretic lectures/discussion at night

11.02.10 repair + pcf fixation of type **IIAb** fistula operated 3x with total incontinence, 4/5 circumferential + pcf refixation in **mutilated** lungu-lungu fistulas type **IIAb** operated 1x with spontaneous healing of type **la** stool fistula, repair of type **IIAb** lungu fistula at L with extensive obstetric trauma operated 1x, **ps-like** repair of **mutilated extensive** type **IIAa** fistula combined with rvf-"repair" type **la**, large vagina stone removal in type **IIBa** fistula operated 2x, sth-cs\_vcvf repair as **2nd stage** after successful type **IIAa** repair, paraurethra pcf fixation in **second** post **IIAb** delivery total incontinence leakage, removal of large bladder stone after multiple repairs combined with large out of vulve **enterocele** repair, dye test + catheter treatment of **second** postpartum total incontinence  
wardround  
theoretic lectures/discussion at night

12.02.10 wardround  
theoretic lectures/discussion at night  
6-hr drive back to katsina

katsina

13.02.10 repair of type **I** cs-vcvf fixed to L ischiac spine, fixation at L as mini-invasive operation of total 3° cervix prolapse for 10 yr, repair of type **IIAa** cs\_uvvcvf with extensive obstetric trauma in obesity operated 1x, urethralization + pcf fixation in total post **IIAb** incontinence grade III, ureters + "repair" in **extensive** type **IIAa** fistula  
wardround  
theoretic lectures/discussion at night

14.02.10 repair + pcf fixation of multiple type **IIAb + strange I** fistulas, early closure of type **IIAa** fistula with healing proximal type **la** stool fistula, repair of type **I** cs-vcvf  
wardround  
3-hr drive to kano in the afternoon

15.02.10	early 4/5 circumferential repair + pcf refixation of type <b>IIBb</b> fistula in obesity, early repair of type <b>IIAa</b> fistula in PXII patient, ureter L + repair + pcf repair of type <b>IIAa</b> fistula operated 1x, anorectum + sphincter etc repair of type <b>IIBb</b> stool fistula, catheter treatment of <b>necrotic</b> type <b>IIAa</b> fistula, catheter treatment of <b>necrotic</b> type <b>IIAa</b> fistula with atonic bladder pre- and postoperative consultancy in 18 problem patients wardround                      theoretic lectures/discussion at night
16.02.10	4/5 circumferential repair + pcf refixation in type <b>IIBb</b> fistula, <b>last resort</b> desobliteration + repair + fixation in type <b>IIBb</b> fistula with total 3° cervix prolapse, ureter R + 3/4 circumferential repair + pcf refixation of type <b>IABb</b> fistula operated 3x, “continent” urethra/avw reconstruction in <b>second</b> type <b>IIBb</b> fistula pre- and postoperative consultancy in 14 problem patients wardround                      theoretic lectures/discussion at night
17.02.10	repair + pcf repair of type <b>IIAa</b> fistula operated 3x, <b>last resort</b> “continent urethra/avw reconstruction” of <b>second</b> total post <b>IABb</b> delivery incontinence leakage, 4/5 circumferential repair + pcf refixation as <b>first stage</b> of <b>multiple extensive</b> type <b>IABb</b> fistulas with obesity pre- and postoperative consultancy in 10 problem patients wardround                      theoretic lectures/discussion at night
18.02.10	<b>complicated</b> repair in type I cs-vcvf, <b>ps-like</b> repair of <b>mutilated extensive</b> type <b>IIBb</b> fistula operated 1x, repair of type I cs-vcvf, <b>ps-like</b> fixation of avw/cervix in <b>extensive</b> type <b>IIBb</b> fistula operated 1x with <b>healed</b> rvf-repair wardround                      3-hr drive back to katsina

19.02.10	early repair + pcf fixation in type <b>IIAa</b> fistula after failed catheter treatment, ureter R + repair of type <b>IIAa</b> cs-uvcvf in PXIII patient operated 1x, ureters + “repair” + pcf refixation of <b>extensive “inoperable”</b> type <b>IIBb</b> with type <b>Ic</b> stool fistula wardround                      theoretic lectures/discussion at night
20.02.10	ureters + 3/4 circumferential repair + pcf refixation in large type <b>IAB</b> fistula combined with repair of <b>Ia</b> stool fistula, repair of <b>mutilated</b> type <b>IIAa</b> cs-uvcvf operated 6x, “continent urethra/avw reconstruction” in <b>mutilated extensive second</b> type <b>IIBb</b> fistula after multiple repairs, repair + pcf repair of type <b>IIAa</b> fistula with fixed cervix, catheter treatment of type <b>IIAa</b> fistula, catheter treatment of type <b>IIAa</b> fistula, catheter treatment of postpartum atonic bladder, catheter treatment of type <b>IIAa</b> fistula combined with objective stress incontinence wardround                      theoretic lectures/discussion at night

21.02.10 ureters + repair in type **IIAa** fistula combined with anorectum + sphincter ani etc repair of type **IIBb** stool fistula with real tissue loss sphincter ani operated 1x, urethralization + pcf refixation in total post **IIAb** incontinence grade III operated 1x. **last resort** fascia-euo raphy + pcf fixation in post **extensive IIAb delivery** total incontinence grade III  
wardround 3-hr drive to kano in the afternoon

kano

22.02.10 circumferential repair + pcf refixation in **mutilated** type **IIBb** fistula, ^ repair of type **IIAa** fistula  
pre- and postoperative consultancy in 23 problem patients  
wardround theoretic lectures/discussion at night

23.02.10 ureter R + repair + pcf refixation as **first stage** in **multiple** type **IIAa** fistula + cs-vcvf, repair + kwaskwarima in **second mutilated** type **IIAa** fistula, repair of doctor yankan gishiri type **IIBa** fistula operated 2x, **minimum last resort** repair of **mutilated** type **IIBb** fistula operated 2x  
wardround 3-hr drive back to katsina

katsina

24.02.10 repair + pcf repair/fixation in type **IIAa** fistula after failed catheter treatment, repair + pcf repair in **mutilated** type **IIAa** fistula operated 2x, ureter R + neourethra + bladder fixation as **first stage** in **extensive** type **IIBb** fistula operated 1x, continent urethra/avw reconstruction as **second stage** in **extensive** type **IIBb** fistula following successful circumferential bladder fixation as first stage, **last resort** urethralization + pcf fixation in total **post IIAb** incontinence grade III, cs-vcvf repair as **second stage** after successful circumferential repair of type **IIAb** fistula as first stage  
wardround theoretic lectures/discussion at night

25.02.10 fixation at L of total 3° cervix prolapse for 50 yr, cs-vcvf repair as **second stage** following successful type **IIAa** repair as first stage with an interval of 11 yr, repair and perineal body repair of type **Ila** stool fistula operated at least 1x  
wardround 3.5-hr drive to zaria in the afternoon

zaria

26.02.10 early repair + pcf repair in type **IIAa** fistula, ureter R + repair of type **I** fistula with ureter prolapse after failed catheter treatment, **last resort** ureters + **ps-like** repair of **mutilated extensive** type **IIAb** fistula fixed to cephalad symphysis operated 1x. repair and pcf repair in **mutilated multiple** type **IIAa** fistula operated 2x, **last resort** pcf/avw fixation in total **post IIAb** incontinence grade III after 2x repair and leaking 40 yr, anorectum + sphincter ani etc repair of type **IIBb** stool fistula operated 1x  
wardround theoretic lectures/discussion at night

27.02.10 **tricky** repair of type **I** cs.-vcvf fixed onto R ischiac spine, “repair” of type **IIAb** lungu fistula at L 2x operated and healed rvf-repair, **early closure** of type **IIAa** fistula, **early closure** of **second** type **I** fistula  
wardround 3.5-hr drive back to katsina

28.02.10 urethralization + pcf fixation in total genuine intrinsic\_stress incontinence grade III, **last resort** “urethra/avw recobstruction” of extensive **mutilated “inoperable”** type **IIBb** fistula operated 2x, **early closure** of minute type **I** operated 1x, fixation at L of total 3° cervix prolapse for 40 yr, repair of type **I** tah-cs-vvf after failed catheter treatment, “repair” + avw of **second** type **IIBb** fistula operated 2x  
lectures: obstetric trauma in relation to inlet ring, pelvic floor anatomy, importance of pcf/atf/atl/pcm/iom/licm/iscl/ssl/pm, mechanism of minute fistula  
wardround                      theoretic discussion at night

sokoto

02.03.10 repair of **mutilated** scarred **IIAa** fistula, repair + pcf refixation of **complicated IIAb** fistula, repair + cervix reconstruction of 1 cm type I csvcvf + 2x1 cm anterior cervix loss, repair by duplication of **mutilated second IIAb** fistula, **ps-like** repair of that **specific IIAa** fistula, repair + pcf repair of type **IIAa** fistula with **b characteristics**  
pre- and postoperative consultancy in 5 problem patients  
wardround                      theoretic lectures/discussion at night

03.03.10 ureters + longitudinal repair of longitudinal **IIAa** fistula, **early** repair + pcf repair of total intrinsic\_stress incontinence with minute type **IIAa** within transverse pcf defect and no indirect connection of pcf not healed by catheter for 6 wk, 3/4 circumferential repair + pcf/avw repair of large **IIAb** as **minimum surgery** leaking 35 yr and patient not drinking, repair of type I sth-cs-vcvf within cervix remnants, catheter treatment of type **IIAa** fistula  
pre- and postoperative consultancy in 5 problem patients  
wardround                      theoretic lectures/discussion at night

04.03.10 repair of **mutilated** small 0.2 cm 0 type I fistula in obesity, repair of minute **second** type **IIAa** fistula operated 2x, **minimum surgery early** circumferential repair + pcf refixation of type **IAB** fistula after failed catheter treatment, repair of **multiple mutilated** type **IIAa** fistulas operated 1x, **assessment under anesthesia** of **inoperable IAB** urine fistula and **inoperable** type **Ic** stool fistula  
pre- and postoperative consultancy in 5 problem patients  
wardround                      theoretic lectures/discussion at night



11.03.10 **assessment under anesthesia of inoperable second type IIBb** fistula, **last resort unusual ps-like** “repair” of “**operable**” type **IIAb** fistula leaking 27 yr, anterior colpocervicosuspension for **third** total post **IIBb** delivery incontinence grade III combined with anorectum + sphincter ani etc repair of **third** type **IIBb** stool fistula in **empty pelvis**  
wardround 3-hr drive back to katsina

katsina

12-03-10 **early** 3/4 circumferential repair + pcf refixation of type **IIAb** fistula, **complicated** “repair” of **severely mutilated second** type **IIAa** fistula operated 4x, ureter R + repair of type **IIAa** fistula with bladder base prolapse, catheter treatment of **necrotic** type **IIAa** fistula + atonic bladder and **objective stool incontinence** with pos ar  
pre- and postoperative consultancy in 8 problem patients  
wardround theoretic lectures/discussion at night

13.03.10 **early closure** + pcf repair of **strange** type **IIAa** fistula in obesity +++ not healed by catheter with healed stool incontinence, **early** circumferential repair + pcf refixation as **minimum state-of-the-art surgery** of type **IIBb** fistula, **early closure** of type **IIAa** fistula with healed stool/flatus incontinence  
lectures: minimum surgery, physiologic forces of tension  
wardround theoretic discussion at night

14.03.10 fixation at L of total 3° cervix prolapse for 15 yr, sphincter ani + perineal body reconstruction in **isolated** type **IIB** stool fistula  
I lectures: theoretic background of cervix prolapse + practical **mini-invasive** fixation + sphincter ani rupture  
wardround 3-hr drive to kano in the afternoon

kano

15.03.10 **early** urethralization + closed euo-rhaphy in total intrinsic incontinence grade III in that specific trauma, repair of **second** now yankan gishiri type **I** fistula bco bleeding, **early repair** + transverse pcf repair of type **IIAa** fistula, catheter treatment of atonic bladder, catheter treatment of type **I** cs-vcvf, catheter treatment of type **IIAa** fistula in severe vagina stenosis/shortening, catheter treatment in atonic bladder  
lectures: atonic bladder, urethralization etc in incontinence  
wardround theoretic discussion at night

16.03.10 ureters + **early** circumferential repair + pcf refixation in **extensive** type **IIAb** fistula fixed to cephalad symphysis  
lectures: immediate management by catheter and/or early closure  
wardround 5.5-hr drive to abuja

abuja

17.03.10 discussions about renovation of water supply of babbar ruga fistula teaching hospital and discussions about short-course training 20 nigerian doctors under MDG  
5-hr drive to bauchi in the afternoon via jos

18.03.10 discussions about setting up a **new** fistula repair center in bauchi state since many patients are being referred either to kano or katsina under the national vvf masterplan that each and every of the 36 states of nigeria should have its own repair center and that each and every of the 6 geopolitical zones should have its own teaching center  
in the afternoon 5-hr drive to zaria via jos

[illegible]

katsina

21.03.10 repair + pcf fixation of **mutilated** type **IIAa** fistula with total incontinence, **early** 4/5 circumferential repair + pcf refixation in **second** type **IIAb** fistula, repair of **mutilated minute** type **I** cs-vcvf in obesity +++ operated 3x with objective stress incontinence, **last resort** urethralization + pcf fixation in total **post IIAb** incontinence grade III in obesity ++ operated 1x, suprapubic cystostomy + **new impacted** stone removal in chronic urosepsis  
wardround                      theoretic lectures/discussion at night

abuja

23.03.10 final discussions about short-term training of 20 nigerian doctors from federal medical centers, 10 from the north and 10 from the south  
6.5-hr drive back to katsina where we arrived at 20.00 hr in the evening

# **National VVF Project Nigeria**

## **comments training manual isofs-figo-rcog**

### **introduction**

the last 50 years i have been working in some kind of teaching/training job on a variety of issues in general and for some 40 years on surgery in special; during my 25 years of teaching/training in the obstetric fistula there have been almost 350 doctors (from illiterate interns with in the end 800-1,000 repairs up to highly experienced surgeons/professors), over 350 nurses and ... other persons in a variety of training programmes continuous on-the-job training of the doctors in 12 different centers, formal training at beginners, at advanced, at very advanced and at trainers level, and informal training programmes at workshop as an introduction; at least 15 of my trainees have performed from far over 1,000 up to over 5,000 VVF/RVF-repairs

### **general remarks**

the time and energy the trainer has to invest (see my logbook training february-march 2010) is far more than I ever saw in my life in the industrialized world where I spent some 12 years in a training/teaching position out of which 7.5 years as Oberarzt in der Chirurgie in full teaching hospitals in Germany with the assignment to teach the residents surgical skills and management

where is a professor in the whole world giving so intensive **private** training/teaching to a resident doctor in training having a trainee some 14 hours a day continuously around him and that 7 days a week

if it is 100 hours per trainee over a period of 4-6 years the trainee is very lucky; most of the training is being done by senior registrars and chefs de clinique

where did I see/experience full scientific explanation of mechanism of pathology, pathophysiology, pointing out the specific traumatic lesions, teaching live anatomy of the pelvis floor, step-by-step teaching and step-by-step prognostic prediction during each and every operation of what is going to happen (and why) to the tissues involved before each step and then check if that really happened after each and every step, questions & answers during as well as after the procedure and then that followed up by lectures about the scientific background with later on extensive discussions about everything

because this is how/**what we teach/train: not a trick but insight/understanding**

there is **no** time/energy : reward **benefit** for the trainer

in the industrialized world the trainee has to contribute to the running of the medical work in the department, actually without resident doctors (being among the cheapest employees) most teaching hospitals would have to close down

here the trainee does not give anything but only takes everything and benefits 100%;

however, the trainer gives everything but takes only the trouble and benefits 0%

as well all kinds of arrangements like visa, accommodation, transport etc have to be made

that is not a healthy situation and the worst **unbalanced** contract one can get in life

## special remarks

this manual can only be implemented if a trainee comes for a minimum of 6 month to 1 year and even that period is not sufficient

however, here the trainer is expected to train/teach the trainee the **noble art and science of obstetric fistula management** within 4-6 weeks under rather primitive conditions; though in the industrialized world postgraduate training in urogynecology will take a minimum of 4 years after having been trained as a gynaecologist, urologist or surgeon for a period of 4-6 years under optimal conditions

## introduction

no comments

## purpose of the course

a holistic care is a utopia (even in the industrialized world) and invented by **verbal** surgeons who can only diagnose the fistula by the smell of urine; it may work for fund raising; however, i still have to see the first patient healed by verbal rhetoric

the best way to treat the **whole** patient is by **closing the fistula**; that is why the patient comes to the surgeon since that is his profession; his responsibility is to perform his surgery to the best of his knowledge, expertise and skills out of compassion with the suffering of the patient

do not shift responsibilities towards the surgeon which are out of his profession

even if it turn out she has become **"incurable"** in the end the patient is responsible for her life and **certainly not** the surgeon

rehabilitation means one teaches the patient how to take care of her life herself and not to make her dependent upon others for the rest of her life

## target groups

though i always propagate the whole team (surgeon, theatre nurse, anesthetic nurse and 2 pre- and postoperative nurses) should be trained, this hardly happens and only the surgeon comes for training though there is enough money available

this manual only deals with surgeons

## training and facilitation

no comment

## performance assessment

besides all the clinical teaching it will be an enormous additional stress for the trainers to fill up all types of assessment forms and writing an appraisal throughout the training period and at the end

## learning and assessment support

## course timetable and checklist

it is very good for the trainee to write down everything (s)he sees and does during the period of training; in the end it can be discussed with and signed by the trainer

## learning session

lectures	ok
group work	how if the surgeon comes alone
bedside teaching	ok
team discussion	how if there is no team
video learning sessions	the problem: it is 2D for a 3D situation

role play session	is the daily reality not sufficient; why make a reality into an artificial role play; there is so much to do; so do not waste valuable time
demonstration/participation	ok; explicit demonstration of the actual obstetric lesions and how to deal with them, theoretically and practically including pre-, intra- and postoperative care
field visits	in our program the surgical trainee will see multiple centers with different set-up; however, this does not mean that we are going to visit patients in the field; anybody can do that at his/her own convenience but do not waste my valuable time
live demonstration perform surgery	is that not double; see demonstration + participation up to a certain extent; i do not believe in the hands-on approach unless it has been preceded by extensive teaching of the theoretical and practical background of the obstetric trauma; it does not make sense to learn a trick since it takes a life time to become an expert fistula surgeon
reflective log keeping	very valuable

### **appraisals**

that is ok but another stress upon the trainer though in a training period of 4-6 weeks this can only be done half-way and at the very end

### **reflective learning**

that should be done by any doctor right from the beginning to the very end of his professional career

### **personal development planning**

that is a continuous process throughout life

### **logbook**

#### **logbook of competence**

depending upon previous educational/experience level  
for interns without any experience whatsoever  
for general doctors with 3 years of surgical experience  
for consultant gynaecologists/surgeons/urologist as introduction  
for advanced level when the trainee has performed 100-150 repairs personally  
for trainer level when the trainee has performed some 500 repairs personally  
for very advanced level for certain specific problems

### **observation**

first one must understand the obstetric trauma in relation to that specific fistula, then the resulting tissue loss and then how to reconstruct the functional anatomy

### **direct supervision**

no comment

### **independent practice**

the more experienced the surgeon, the better he is aware of his own responsibilities  
the responsibility of the trainer is only to teach the trainee to the best of his knowledge, experience and skills  
however, the trainer is not responsible for what the trainee does afterwards  
what the trainee does afterwards is his/her sole responsibility

## **logbook of experience**

that is fine

## **assessments**

### **OSATS**

do not shift responsibilities to the trainer which are not his

the surgical skills, attitude etc etc of the trainee must have been assessed in depth during his/her consultancy training over 4-6 years

is the trainer now (after 4-5 weeks) to tell the trainee he is not fit (though he passed 4-6 years of training somewhere else); how often is this happening in the industrialized world; do you know how sensitive consultants are about their skills??

since it is in writing another extra stress upon the trainer

how to assess the interaction with the team if the surgeon comes without his own team in a totally strange situation; is a top sportsman travelling and performing well without his own team

interpersonal skills vary from person to person and there are more roads leading to rome; we should restrict ourselves to the complex trauma of the obstetric fistula and the surgical skills/management

### **mini-clinical assessment**

another 20?-min extra stress upon the trainer and then another 30 min to discuss it with the trainee and that after each clinical encounter (during the 50-day period february-march 2010 there were some 400 clinical encounters with 225 surgical procedures; that would mean  $400 \times 50 \text{ min} = 20,000 \text{ min} = 333.3 \text{ hours}$  of assessment)

### **case-based discussion**

questions & answers is the norm during and after all our surgical and other procedures whereby the stress is again solely upon the trainer

if the discussion now should be disclosed to the patient and written down in the notes how much time will be left for the **only relevant important thing: closure of the fistula**

### **for your information**

each and every patient in our program is treated with all dignity and her full rights, informed about her condition, is asked if she agrees with examination, operation etc (if not which happens rarely, she is/will not be examined/operated), she is given time if necessary to make a difficult decision and right from the beginning up till her last follow-up she receives extensive repeat health education

out of compassion we do everything in our power, and that is a lot, to restore her health and her dignity so she can lead a normal life whatever that may be

### **for your understanding**

it is not my duty (as the **verbal surgeons** do tell us) to train/teach other surgeons; out of myself i have been doing this for the last 25 years, already when **no** one was interested in the obstetric fistula; now it has become very sexy

## special comments

the **name of the manual** should be  
**isofs competence base manual of training etc**  
with contributions by  
**names of all the (isofs) surgeons** who contributed without any preference  
in collaboration with and financed by  
**figo and rcog**  
or something like that

## accreditation

this should be done by **isofs** since only they have the real expertise

i have been trying to follow this manual step-by-step but found it **too time consuming** besides all the other things i have to do; it is **not feasible** in **short-course** training; but i will use it completely in **full-course** training , e.g. the young nigerian doctor currently under continuous training in babbar ruga fistula teaching hospital

so in the future i will use this as a **comprehensive guideline** with all the trainees at whatever level

since everybody takes it for granted that the trainee profits 100% and the trainer only 0% i would like raise the question: **how much is the trainer worth**

since i do not like hypocrisy i would like to close with a **quote about ethics** from a greek philosopher (Plato or Socrates) some 400 years BC

an ethical person behaves ethically whilst an unethical person will bend the rules

## documentation + fistula research 1984-2010

### documentation

the strength of the project is the complete systematic meticulous documentation by over 19,500 individual computerized comprehensive reports of history, findings, operation procedures and evidence-based results of each patient (from the very first to the last in a consecutive way) combined with prospective studies; as well the findings are documented by schematic drawings and some 40,000 full-color slides and 25,000 full-color digital photos and the different operation techniques by some 80-100 hours of full-color analogous/digital videotapes; from each report we make 2 hard copies

### evidence-based results

the patient gets her own card in a plastic map with date and type of operation which she presents any time she comes for follow-up; at any postoperative follow-up, normally 5x from 2 wk up to 6 mth but even years later, the findings are written down on the hard copy and later entered into the computerized report which contains up to 250 different parameters

from time to time an analysis is made of the evidence-based results to draw sensible conclusions about the operation techniques and the project as a whole

the documentation is time consuming and takes stamina but without documentation there is no feedback and no proof

### research

this is a continuous process, first in a retrospective way but from 1988 onwards, only in a **prospective** way about the obstetric trauma in its broadest sense

only by clinical research we came far and found **scientific, theoretic and practical** solutions for each and every problem encountered

it resulted in a long list; the most important are

PhD degree at University of Utrecht in 1989 about the obstetric fistula

scientific classification of VVF with consequences for operation technique and evidence-based prospective outcome as to closure and continence

scientific classification of RVF with consequences for operation technique

secondary prevention by the immediate management

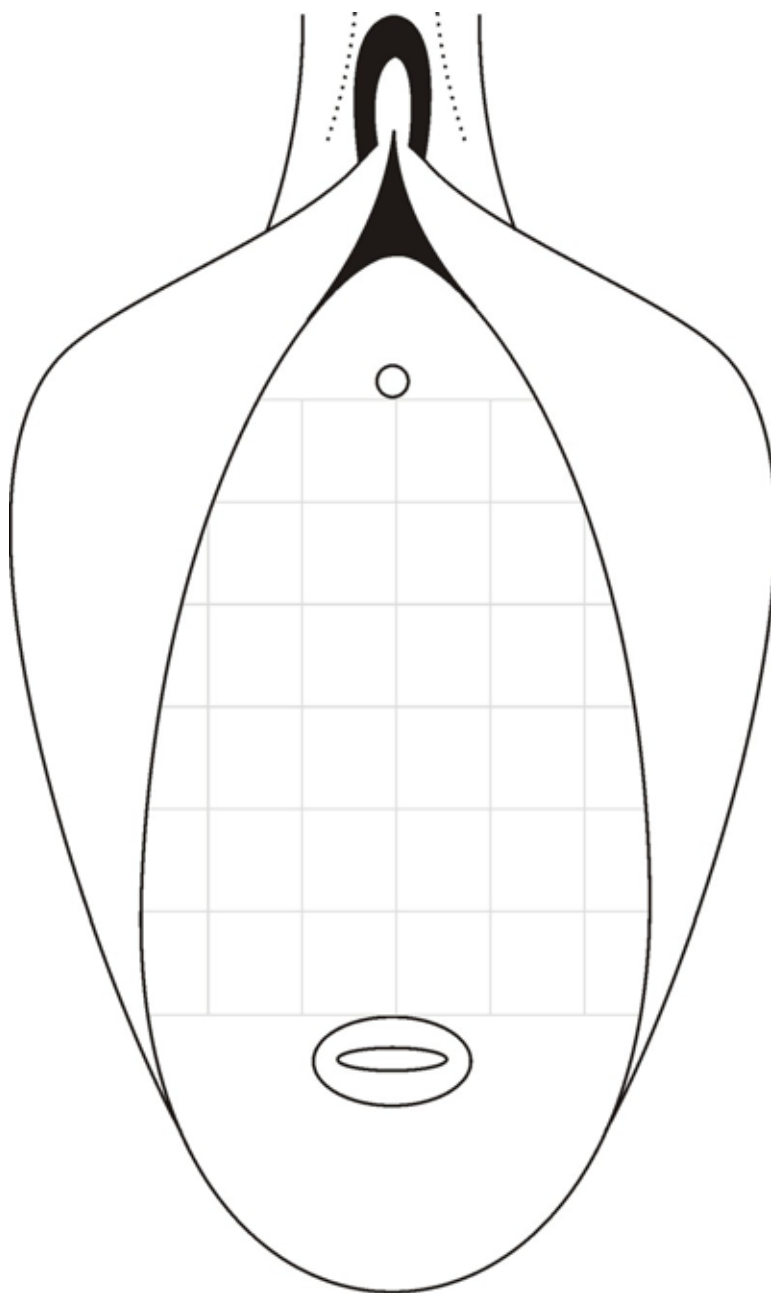
prevention of postrepair incontinence by meticulous repair of the pubocervical fascia

logical physiologic approach to genuine and postrepair total urine incontinence where reconstruction of the functional anatomy restores normal physiology: **continence**

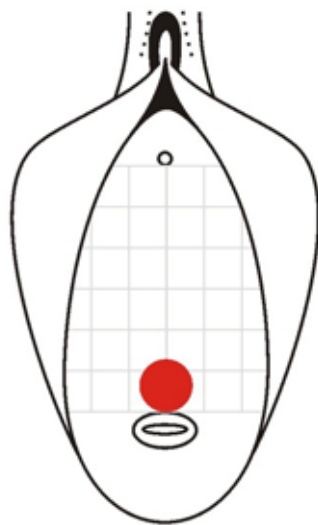
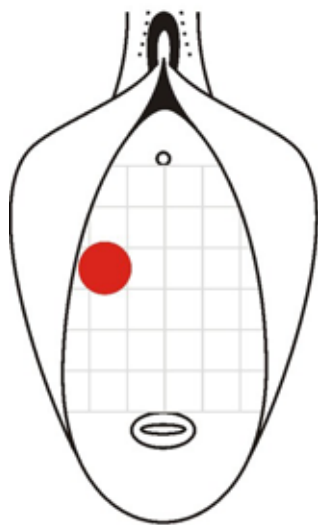
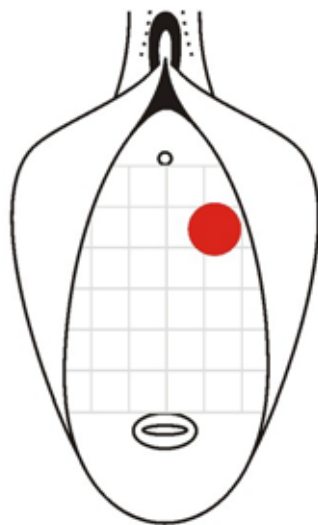
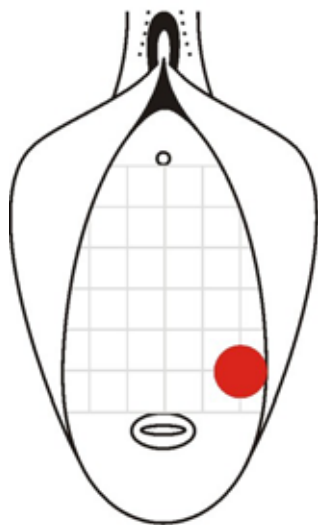
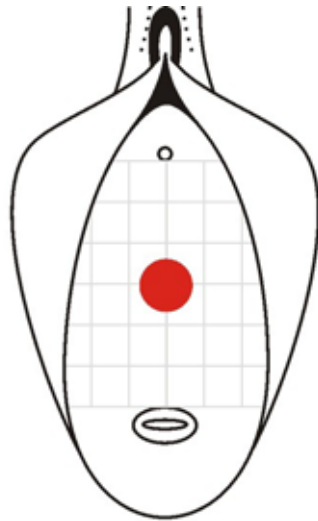
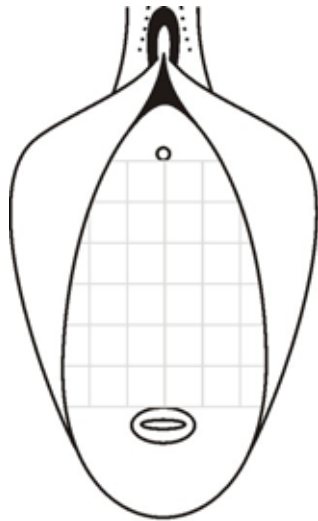
physiologic operation technique for sphincter ani rupture

mini-invasive uterus-saving operation for total 3° cervix prolapse

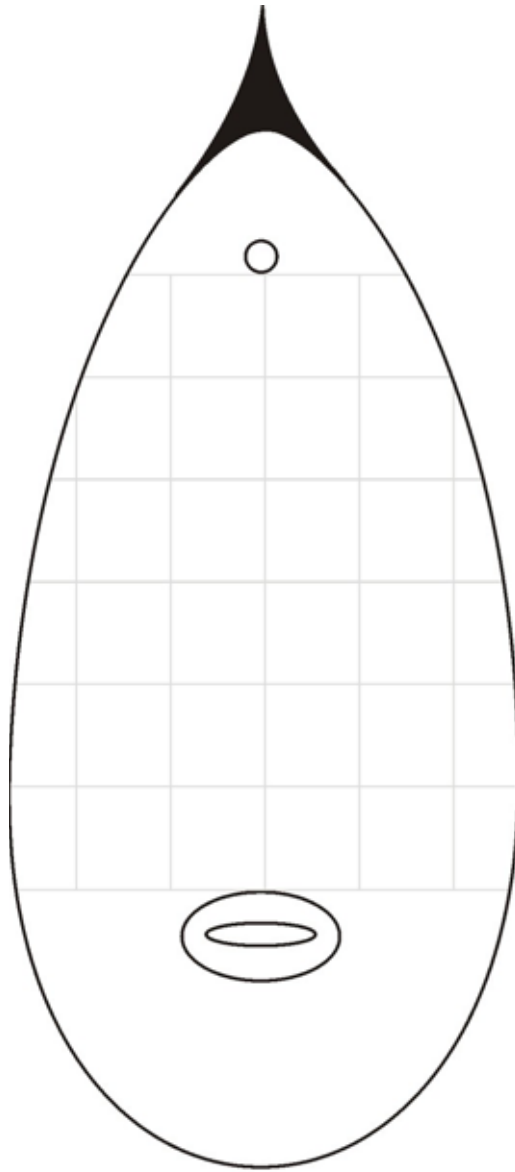
the **philosophy of minimum approach** proved **highly efficient and successful**



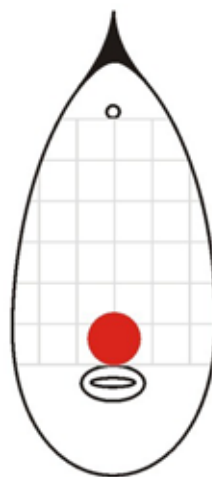
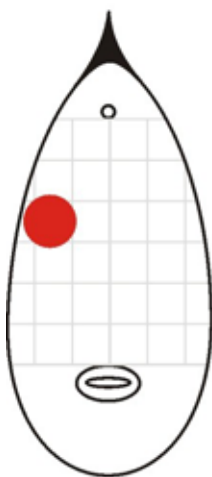
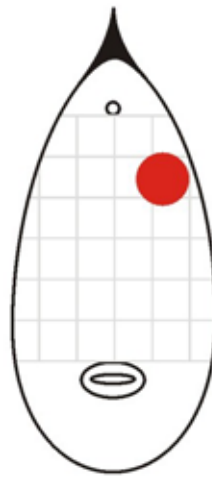
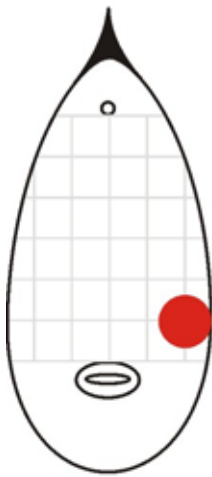
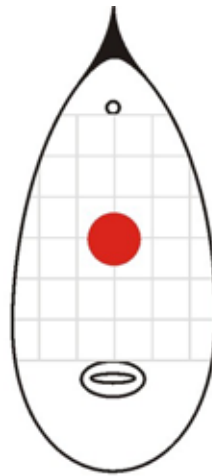
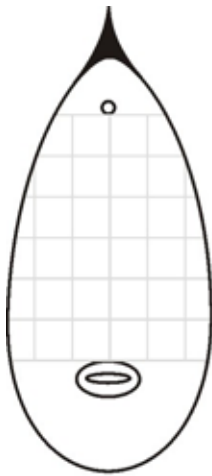
basis raster 6



examples



basis raster 6



examples

## **prevention**

only by building hospitals, roads and schools  
lesson learned from history

in the USA 480,000 teenage deliveries during the year 2002  
however, not a single obstetric fistula

## **there is no relation to**

early marriage, height, religion, tribe, race, rural area etc

only to

## **poor obstetric care**

## **is it not time to change the strategy**

after 30 years of failed safe motherhood campaigning

which did not bring a single positive result  
due to the arrogance of the aid organizations  
spending a fortune  
on things which make no sense

at the moment it does not make a difference  
where a woman delivers  
she is being neglected all the same  
at home and in the hospital  
dead infant and dead or mutilated mother

does it make sense to mobilize the community to send a patient to a non-  
functioning hospital

is the community or religious leader coming out of his bed to perform an  
emergency cesarean section

in laure fistula center 70% of the patients are coming from within kano metropolis; 30% have even delivered in the same hospital

in the southern parts of nigeria many patients deliver in the church and get their fistula inside the church

does it make sense to keep partograms if there is no follow-up due to a non-functioning hospital

will legislation to elevate the age of marriage eliminate the obstetric fistula as people want us to believe

will legislation to elevate age of marriage eliminate early sex/early pregnancy or early childbearing; or does this increase the risk of unsafe abortions

since obstetrics is 100% female from the beginning to the very end (except a male obstetrician performing a cesarean section)  
does it make sense to address the males  
is it not better to address the females themselves

more than 90% of the financial resources are spent on the organization and expensive talkshops

not up to 10% spent on patient care or prevention

however, where is the international strategy  
to set up

**network of 125,000 functioning obstetric units in africa**

improve the hospital obstetric care so that  
the highly intelligent public notices the difference  
live infant and healthy mother  
themselves

# Babbar Ruga Fistula Teaching Hospital

## KATSINA

### Katsina State

#### report on VVF/RVF repairs

**1984-2010**

VVF-repairs:	11,719
RVF-repairs:	1,453
<b>total</b>	<b>13,172 repairs</b>

there are three main services within the hospital as obstetric fistula center, referral center for leprosy and referral center for tuberculosis with a very fine hostel annex rehabilitation center just opposite the hospital

both the Ministry of Health and the Ministry of Women Affairs and Social Welfare are highly committed, as is the Governor himself

a new fully equipped operating theater complex was donated by Service to Humanity Foundation by the First Lady of Katsina State and commissioned by the First Lady of the Nation

the water supply was renovated with help from the dutch government

since started from scrap in January 1984 it has become an important comprehensive obstetric fistula repair, (inter)national training, research and rehabilitation center with good infrastructure and continues to be instrumental in giving thousands of destitute patients a second chance in life; further development is planned

also some fistula surgery is being performed in Funtua General Hospital, Katsina Maternity Hospital, Daura General Hospital, Kankiya General Hospital and Malumfashi Hospital; all the doctors have been trained within the National VVF Project

some 30% of the patients come from neighbouring République du Niger

more staff, doctors and nurses, from Katsina State have to be trained

surgeons: Dr Yusha'u Armiya'u, Dr Shehu Bala, Dr Halliru Idris, Dr Jabir Mohammed, Dr Aminu Safana, Dr Isah Shafi'i, Dr Abdulrasheed Yusuf, Dr Moses I Sunday-Adeoye, Dr Awal Sani, Dr Abdulmajid, Dr Kabiru Abubakar, Dr Imam Amir, chief consultant and others

# Laure Fistula Center Murtala Muhammad Hospital

## KANO

### Kano State

#### report on VVF/RVF repairs

**1990-2010**

VVF-repairs: 8,079

RVF-repairs: 1,086

**total 9,165 repairs**

the obstetric fistula service within Kano State should be a model for the other states since the rehabilitation center annex hostel is outside but near the hospital and managed by the Ministry of Social Welfare; so there is no conflict of interest; the cooperation is fine

both the Ministry of Health and the Ministry of Women Affairs and Social Welfare are highly committed

it is an excellent place for training nurses and other health personnel, and plays a major role in the training of doctors

although obstetric services are free of charge in the state the system is not functioning, not even in the capital since the majority, some 70%, of our new patients come from within Kano municipality and 30% have even delivered in the same hospital

there was a setback as all the theater nurses were transferred to other units within Murtala Muhammad Specialist Hospital; this happens from time to time

quite a number of VVF-repairs are performed in Danbatta VVF-Center, Aminu Kano Teaching Hospital, Sheikh Jiddah Hospital, Wudil General Hospital and other hospitals; all the doctors have been trained within the National VVF Project

dr imam amir with over 3,000 repairs is the fistula surgeon i/c

more staff, doctors and nurses, from Kano State have to be trained

surgeons: Dr Imam Amir, Dr Said Ahmed, Dr Zubairu Iliyasu, Dr Kabiru Abubakar, Dr Idris Abubakar Dr Hauwa Abdullahi, Dr Muktar Hamza, Dr Habib Gabari, Dr Hadiza Galadanci, Dr Halliru Idris. Dr Abdulrasheed Yusuf, Dr Umaru Dikko, chief consultant and others

# Maryama Abacha Women and Children Hospital

## SOKOTO

### Sokoto State

#### report on VVF/RVF repairs

**1994-2010**

VVF-repairs:	2,705
RVF-repairs:	191
<b>total</b>	<b>2,896 repairs</b>

it is a very important center with good facilities and a high-quality service where many patients present for surgery; it needs further development with regards to manpower in order to perform the 300-400 repairs a year needed

the hospital is under authority of the Ministry of Women Affairs whilst the staff comes under the Ministry of Health; both ministries are committed to improve things

though we have been lobbying hard for many years somewhere along the line we cannot get a grip on this center; partially due to political maneuvering of the major organizations

dr ibrahim nakaka makes an effort to perform the simple repairs

however, we would like to move forward to develop this center further not only into a major repair center but also into a training center

the team from Babbar Ruga Hospital makes a major effort (550 km from Katsina) to come "regularly" for 5-day workshops of surgery

more staff, many doctors and many nurses, have to be trained

surgeons: Dr Nakaka Ibrahim, Dr Abdullahi Gada, Dr Zubairu Iliyasu, Dr Bello Tsafe, Dr Abdulrasheed Yusuf, Dr Halliru Idris, Dr Abdulkarim Garba Mairiga, Dr Idris Abubakar, Dr Paul Hilton, Dr Abba Wali, Dr Bello Lawal and chief consultant and others

**Fistula Units**  
**B\_KUDU, HADEJIA and JAHUN**  
**Jigawa State**

**report on VVF/RVF repairs**  
**1996-2010**

this is mostly the work of dr said ahmed who is involved in the VVF/RVF-repair since 1991; though he left the government service he is still deeply involved

VVF-repairs: 2,705

RVF-repairs: 153

**total 2,858 repairs**

there has been a complete revival of fistula surgery in jahun general hospital since msf france took a serious interest in this place since 2008/09

dr said ahmed and dr kabiru abubakar are the professional motors of the revival operating during the weekends upon large numbers of patients

two doctors and one nurse were trained, but the problem with msf is the high turnover of staff

for the near future, dr kabiru abubakar will leave going to belarus in order to become a consultant surgeon; though during his leaves he will continue to work here

there are many obstetric fistula patients in jigawa state; if not for msf this center would not be functioning at all

definitely, it needs more commitment of the authorities

**nb** dr said ahmed is by far the most experienced indigenous Nigerian fistula surgeon with over 5,000 repairs

surgeons: Dr Said Ahmed, Dr Kabir Abubakar, Dr Isah Adamu, Dr Imam Amir, Dr Salisu Babura, Dr Sunday Lengmang, Dr Sunday-Adeoye, chief consultant and others

## **Special Fistula Center**

### **B\_KEBBI**

#### **Kebbi State**

#### **report on VVF/RVF repairs**

**1996-2010**

VVF-repairs:	1,775
RVF-repairs:	60
<b>total</b>	<b>1,835 repairs</b>

there is a large backlog in Kebbi State especially of patients with highly complicated fistulas who have been operated several times

the center is coming off ground, and after his initial training the medical director dr dantani lantana is doing a fine job; somewhere next year he has to come for another training period

the hospital is run under the Ministry of Women Affairs whilst the staff comes under the Ministry of Health; both ministries are highly committed

the facilities are alright but there is need for a high-quality operating table and good operation lights; otherwise the very difficult repairs cannot be performed

in principle, this new hospital has all the potential to become a major repair center

also needed is a rehabilitation unit annex hostel to provide a comprehensive obstetric fistula service for the state

the team from Babbar Ruga Hospital makes a major effort (700 km from Katsina) to come for 3-4 day surgery workshops of the complicated fistulas; unfortunately, this year we could not make it

definitely, more staff, doctors and nurses, have to be (re)trained

fistula surgeons: Dr Dantani Lantani, Dr Hassan Wara, Dr Lawal al Moustapha, Dr Oladapu Shittu, Prof Oladosu Ojengbede and chief consultant

# Kofan Gayan Hospital

## ZARIA

### Kaduna State

#### report on VVF/RVF repairs

1998-2010

VVF-repairs: 910

RVF-repairs: 69

**total 979 repairs**

the complete structural reconstruction of the hospital has been finalized; from a low-level unit into a comprehensive fistula repair and rehabilitation center

a new 15-bed high-quality postoperative ward was donated by **heineken africa foundation** who are also interested in sponsoring doctors and nurses

to my knowledge it is the only center in the world with a successful holistic approach

all patients are offered rehabilitation (**family care**)

it is the only hospital where systematically a **selective** caesarean section is offered & performed in subsequent deliveries; for this patients are admitted 2 weeks before expected date of delivery; so **20-25% of all the patients** have delivered a **live** infant in this center following a successful repair

and there are **zero** outcasts amongst the more than 800 patients treated so far; even the 6 incurable patients take care of their own lives and have been reintegrated into society since they were provided with skills and means (sewing machine; grinding machine etc); this is **real rehabilitation**

for this, **hajiya aisha ahmed** and **dr ado zakari** have to be praised, together with all the staff for their dedication and commitment

in principle the team from babbar ruga hospital comes once every 2-4 weeks to perform the "difficult" surgery and for on the job training; only the very difficult surgery is referred to katsina; distance from katsina 250 km and via kano 400 km

it is only a matter of time before the major organizations will descend upon this center like **vultures** to claim these achievements as their own

surgeons: Dr Ado ZAKARI, Dr Halliru IDRIS, Dr Abdulrasheed YUSUF, Dr Joel ADZE, Dr Julius GAJERE, Dr Husaina ADAMU and chief consultant

# Faridat Yakubu VVF Hospital

## GUSAU

### Zamfara State

#### report on VVF/RVF repairs

**1998-2010**

VVF-repairs:	1,098
RVF-repairs:	38
<b>total</b>	<b>1,136 repairs</b>

the existing general hospital has become a federal center and then this hospital has become a general hospital; this is a setback for the obstetric fistula surgery

dr sa'ad idris performs most of the fistula operations; even though he has become the commissioner for health

there is high commitment by the state government and usaid-acquire

the chief consultant and team used to come here on a regular base for the surgery but due to organizational problems this is no longer possible; though we are willing to return here if the need should arise

surgeons: Dr Sa'ad Idris, Dr Halliru Idris, Dr Abdulrasheed Yusuf, Dr Imam Amir and chief consultant and others

**Southeast Fistula Center  
annex  
National Fistula Hospital**

**ABAKALIKI**

**report on VVF/RVF repairs**

**2002-2010**

VVF-repairs:	615
RVF-repairs:	43
<b>total</b>	<b>658 repairs</b>

dr moses i sunday-adeoye is the driving force; right from the beginning up till now

during the year the **brandnew** southeast fistula center has been granted the status of national fistula hospital

there is high commitment by the federal government, ebonyi state government, unfpa and usaid-acquire

for the time being this center seems to depend upon workshops by different visiting consultants with their teams

the chief consultant and team spent 9 full days on a surgical workshop

there are many patients to demonstrate the fact that the obstetric fistula is all over nigeria and not restricted to certain areas

to move things forward, and the need is certainly there, far more staff, doctors and nurses, have to be trained in order to care for the **many patients in the southeast**

surgeons: Dr Moses I Sunday-Adoye, Dr Sa'ad Idris, Dr Imam Amir, Dr Sunday Lengmang, Prof Oladosu Ojengbede, Dr Wara; once in a while chief consultant and others

# **Federal Medical Center**

**nguru**

**Yobe State**

## **report on VVF/RVF repairs**

**2008-2010**

VVF-repairs:	106
RVF-repairs:	13
<b>total</b>	<b>119 repairs</b>

this service was started in 2008 on special request by dr mohammed kawuwa, chief medical director, who had attended one of our training programs

however, this is only possible by surgical workshops

after their perioperative nurse and pre/postoperative matron had been trained we could start

so far, 4 workshops have been executed with excellent evidence-based results

we are all so impressed by the dedication and commitment of all the staff and by the results that we are looking forward eagerly towards our next workshop

in principle we are aiming at 2-3 workshops a year

more staff, doctors and nurses, have to be trained

surgeons: dr mohammed kawuwa, dr a a kullima, chief consultant and others

**Maternité Centrale/Hopital National/Centre Hospitalier  
Départemental/Maternité Tassigui**

**ZINDER/NIAMEY/MARADI/TAHOUA**

**République du Niger**

**report on VVF/RVF repairs**

**1996-2010**

VVF-repairs:	1,489
RVF-repairs:	93
<b>total</b>	<b>1,582 repairs</b>

the obstetric fistula service in Zinder is functioning well under the direction of Dr Lucien Djangnikpo

due to logistic problems the team from Babbar Ruga Hospital could only visit this center once (275 km from Katsina)

Prof Sanda with his long-standing experience in the obstetric fistula surgery took over the vvf-service in Hôpital National in Niamey from Dr Abdoullahi Idrissa

since the doctor we trained in maradi left the government service we have not been visiting maradi anymore

we lost contact with Dr Moustapha Diallo from Maternité Centrale in Tahoua

both governments are committed to continue the south-south cooperation

surgeons: Dr Lucien Djangnikpo, Dr Akpaki Faustin, Dr Halliru Idris, Dr Tijjani Mamman Hina, Dr Abdoullahi Idrissa, Dr Moustapha Diallo, Dr Madeleine Garba and chief consultant and others

## **workshops**

there are several general and/or specific objectives: to operate a large number of patients within a short time, to demonstrate the **state of the art** operation techniques, to give high-quality lectures, to tackle a specific problem (stress incontinence, urinary diversion), to promote spinal anesthesia, to initiate doctors with low experience, to further train doctors with experience on an advanced level, to train nurses at all levels, to start a vvf service in a certain area and for advocacy and publicity

### **duration**

from a minimum of 2-3 days to start a vvf service up to 2 weeks if large numbers of patients are available and reliable postoperative care can be secured

### **minimum number of patients**

for a 1-week workshop 25-30 patients and for a 2-week workshop 40-50 patients, otherwise there is no cost-benefit effect

### **venue**

any hospital which can handle the (large) number of patients to be operated within a short time: operation theater, autoclave, pre-/postoperative beds and trained personnel

### **equipment**

if one/two fistula surgeon-trainer: one/two fistula operating table(s) with one/two full set(s) of instruments

### **pre-workshop screening**

the (fistula) doctor of the hospital together with his staff is responsible to collect and screen the patients already far in advance

the logistic officer has to make all the necessary arrangements for accommodation, feeding and transport etc

### **facilitators**

one or two experienced fistula surgeon-trainers, one or two experienced fistula operation theater nurses, one or two experienced spinal anesthesia nurses or doctors and two experienced pre-/postoperative nurses and one logistic officer

### **trainees**

per trainer 3-4-5 doctors together with their operation theater nurse, their anesthetic nurse and their pre-/postoperative nurse

however, if the workshop is meant to start a vvf-service more doctors and especially more nurses and midwives should attend

### **workshop day-by-day**

first day: opening, introduction, questionnaire by trainees for self evaluation and then history taking and examination of the patients, operation time-plan for each day

from second day onwards: wardround, operations with step-by-step demonstration of state of the art techniques, simple operations by the trainees under close supervision, pre-, intra- and postoperative questions and answers, lecture(s) and wardround

last day: ward round, evaluation by all participants, handing out certificates, closure

### **postworkshop follow-up**

the fistula doctor of the hospital and his staff are responsible for the further post-operative care and follow-up of the patients

### **philosophy**

since the emphasis should be placed upon the quality and not the quantity it is better to execute small 4- to 5-day well organized workshops with small numbers of patients than large 10- to 14-day workshops with large numbers of patients where the organization on ground and good postoperative care being the weakest part cannot be ensured

### **optimal workshop**

identify an area where the obstetric fistula is highly prevalent, select an obstetric fistula team, send them for training, this team selects and screens patients and then makes sure the conditions are ok, then invite real fistula surgeon(s) + team the real expert fistula surgeon(s) + team in combination with the obstetric fistula team on ground screens all the patients for a final selection and sets the objectives opening ceremony and handing out of a questionnaire for self-evaluation starts operating whilst demonstrating the step-by-step technique followed by questions& answers about the procedure and theoretical lectures

during the year the chief consultant + team (co)facilitated the following 6 workshops

february 2010 workshop in federal medical center in nguru:	27 procedures
may 2010 workshop in maryam abacha hospital in sokoto:	26 procedures
june 2010 workshop in southeast fistula center in abakaliki:	36 procedures
june 2010 workshop maryam abacha hospital in sokoto:	24 procedures
november 2010 workshop in maryam abacha hospital in sokoto:	27 procedures
november 2010 workshop in federal medical center in nguru:	27 procedures
<b>total</b>	<b>167 procedures</b>

# **third vvf workshop for yobe state**

federal medical center nguru

8th thru 12th of february 2010

## **executive summary**

this workshop was the **third** in a series of more in order to establish a functioning vvf-repair service for yobe state; all in line with the national vvf masterplan that each state should have its own vvf-repair center to bring the service towards the patients

the workshop itself was fine where a total of 23 state-of-the-art operations and 3 catheter treatments were performed in 24 patients whilst 1 patient was classified as inoperable; another 3 patients were placed on bladder drill and 2 patients were not cooperative for operation

we examined, operated and/or consulted all the patients by the end of this workshop

# **third vvf workshop for yobe state**

## **federal medical center nguru**

8th thru 12th of february 2010

### **day-to-day report**

#### **introduction**

we returned to nguru to collaborate in order to set up a regular vvf service; all in line with the national vvf masterplan that each state should have its own vvf-repair center

#### **day-to-day report of the workshop**

##### **monday 8th february 2010**

travelling from Kano to Nguru, having performed 3 repairs in laure fistula center in kano, some 250 km

##### **tuesday 9th february 2010**

surgery seven procedures were performed in 7 patients: circumferential repair with pcf fixation of type IIAb fistula, second stage circumferential repair of type IIAb fistula (3x operated) after cystostomy/stone removal, repair of minute type I fistula (2x operated), last resort final repair of "inoperable" type IIBb fistula (operated 2x), repair of type IIAa fistula with repair of rvf type Ia (continuous diarrheic stool contamination) and circumferential repair of type IIAb fistula (1x operated)  
another 2 patients could not be operated; too complicated and not cooperative from 8.00 to 19.00 hr

wardround

##### **wednesday 10th february 2010**

surgery eight procedures were performed in 8 patients: assessment of inoperable extensive type IIBb fistula, repair with pcf fixation of type IIAa fistula (1x operated), continent urethra reconstruction of type IIBa fistula, last resort final primary suturing of "inoperable" mutilated extensive type IIAb fistula (2x operated), circumferential repair with pcf refixation of type IIAb fistula (2x operated), highly complicated repair of type IIAa fistulas (1x operated) and circumferential repair with pcf fixation in type IIAb fistula (2x operated)  
two patients were treated by bladder drill and one patient referred to katsina since too complicated from 8.00 to 19.00 hr

wardround

#### **thursday 11th february 2010**

surgery      twelve procedures in 10 patients: repair of residual fistula with total incontinence operated 3x, circumferential repair of mutilated type IIAb fistula operated 1x, dilatation + “repair” of residual minute type IIAb fistula with severe uv-stricture operated 1x for vvf/rvf, “repair” of scarred type Ia rvf fistula and ps-like uvvf-“repair” of mutilated extensive type IIAa fistula operated 4x, vaginal removal of large stone from type IIBa fistula operated 2x, second stage repair of tah-cs fistula within cervix remnants after successful type IIAb fistula repair in kano, urethralization of post IIAb postdelivery total incontinence, stone removal as first stage with new fistula + post-rvf enterocele repair operated 5x and catheter treatment for postrepair atonic bladder  
one patient treated by bladder drill leaking once in a while after fall from tree

from 8.00 to 19.30 hr

wardround

#### **friday 12th february 2010**

after the wardround we proceeded on our trip back directly to katsina over some 400km; on the road we had some difficulties since 3 of us were suffering from severe (gastro)enteritis but we arrived safely

a **total of 34 hours** were spent during this workshop on surgery and wardrounds and another **12 hours** on traveling

#### **conclusion**

it was a fine workshop as third step to have a functioning vvf center in yobe state where a total of 23 state-of-the-art operations and 3 catheter treatments were performed in 24 patients whilst 1 patient was classified as inoperable IIBb another 3 patients were placed on bladder drill and 2 patients were not cooperative for operation

**kees waaldijk** MD PhD  
chief consultant fistula surgeon

15th of february 2010

#### **many thanks to:**

dr bala, dr mohammed b kawuwa, dr a a kullima, alhaji hassan z tagali and mrs yemisi e ojo for their dedication/commitment/organization and to the management and all the staff of **federal medical center nguru** for their support

# **vvf workshop sokoto state**

maryam abacha women and children hospital  
sokoto

monday 17th thru friday 21st of may 2010

## **executive summary**

most of the patients had been operated several times by different (in)experienced surgeons with substantial additional surgical trauma; the surgical interventions varied from 1 to 6 times

little or half knowledge is dangerous; and it takes more than a trick to operate upon the obstetric fistula

a total of 22 complicated operations and 4 catheter treatments were performed in 25 patients out of whom only 3 had never been operated before

the patient with the enterovaginal fistula as complication of subtotal cs-hysterectomy had been operated 3x for rectovaginal fistula; the diagnosis was made by inspection (small bowel content) and then RE to exclude connection between the rectum and the vagina; continuing in the same session the abdomen was opened and the ileum closed

like other centers this special hospital has become a fistularium where the inoperable patients stay for the rest of their life; therefore in 5 patients it has been indicated in the operation reports and their hospital files **last resort final**

there were 3 doctors for "training": one from usaid\_acquire, one from birnin kebbi and one from bauchi state

# **vvf workshop maryam abacha hospital**

## **sokoto**

### **day-to-day report**

17th thru 21st of may 2010

#### **sunday 16th** of may 2010

we left katsina at around 13.00 hr and after some 450 km by toyota jeep we arrived safely in sokoto at around 18.30 hr where we had some problems checking into the hotel; abdullahi and kees driving alternately

#### **monday 17th** of may 2010

we proceeded to maryam abacha women and children hospital in sokoto, the venue of the activities, at around 8.00 hr and started to work

- 17.05.10      **seven procedures:** cs-vcvf-repair in obese patient para V with small type I cs fistula, vvf-repair in very obese patient para X with medium type I fistula after cs leaking 33 yr, **last resort** repair of “inoperable” type IIAb fistula operated 1x with primary suturing of type Ib rvf, **last resort ps-like** repair of inoperable type I fistula operated 1x, repair of medium mutilated type IIAb fistula operated 1x and catheter treatment of patient with small type I cs fistula  
and wardround from 8.00 to 17.30 hr
- 18.05.10      **six procedures:** repair of mutilated medium type IIAa fistula operated 1x, repair of medium mutilated type IIAa fistula operated 1x, laparotomy and jejunum closure of type III iatrogenic entero(ileo)vaginal fistula operated 3x + catheter treatment for intrinsic incontinence, repair + pcfx fixation of multiple type IIAb fistulas operated 2x, continent urethra/avw reconstruction of mutilated yankan guriya type IIBa fistula operated 2x + consultancy in 2 patients  
and wardround from 8.00 to 17.30 hr
- 19.05.10      **six procedures:** early closure of type IIAa fistula, repair of tricky type IIAa fistula operated 1x, **last resort** fixation of distal urethra\_euo in total post IIAb incontinence operated 4x, circumferential repair of type IIAb fistula with 2° cervix prolapsed, catheter treatment in total incontinence due to sacral plexus trauma and catheter treatment of fresh type IIAa fistulas + consultancy in 2 patients  
and wardround from 8.00 to 17.00 hr
- 20.05.10      **five operations:** complicated repair of minute lungu fistula type IIAb with intrinsic incontinence operated 1x, repair of scarred small type IIAa fistula, first stage minimum repair of severely mutilated extensive multiple type IIBb fistula operated at least 1x, step-by-step demonstration of circumferential repair of type IIAb fistula in obese patient para XII operated 1x, neourethra/avw reconstruction in **mutilated extensive** type IIBb fistula operated 1x  
and wardround from 8.00 to 17.00 hr

21.05.10      **two operations: last resort** avw\_euo distal fixation in **inoperable post IIAb** intrinsic incontinence operated 6x and leaking 40 yr since she was 15 yr old, **last resort** urethra closure/rhaphy + pcf fixation of type **IIBa** fistula operated 2x and wardround from **8.00 to 11.00 hr**  
traveling same 450 km back to katsina where we arrived safely      mun gode Allah

### remarks

the **major** problem is that most patients had been operated several times in different hospitals by different (in)experienced surgeons resulting in substantial **additional surgical** trauma upon the already existing obstetric trauma; little or half knowledge is dangerous

so, most of the surgical procedures were highly complicated to almost impossible; we stuck to the minimum

another problem is that this hospital has for a long time become a fistularium where the inoperable patients stay for the rest of their life and interfere **negatively** with the functioning of the center

therefore in 5 patients it has been written down in their operation reports and in their hospital files: **last resort final** which really means no more surgical intervention

two young doctors started their training as well during this workshop; however, a workshop is not the right tool for training

### time spent

a total of **40 hours** on the workshop and **11 hours** on travelling in 6 full days

### conclusion

it was a fine workshop where **22 operations** and **4 catheter treatments** were performed in 25 patients; besides this 2 young doctors started their "training"

kees waaldijk, MD PhD  
chief consultant fistula surgeon

25th of may 2010

### many thanks to

dr ismaila tukur from usaid-acquire and all the staff of the **maryam abacha hospital** for their continuing support

# **vvf-workshop ebonyi state**

southeast fistula center

**abakaliki**

7th thru 15th of june 2010

## **executive summary**

in line with the national plan on eradication of the obstetric fistula and on special request by dr sunday adeoye, ebonyi state government, federal ministry of health and usaid-acquire the obstetric fistula team travelled to abakaliki in order to help them out with the very complicated fistulas in the southeast zone of Nigeria

though in total it took us 9 days, only 5 days could be spent on surgery, the rest on travelling

however, we were able to perform a total of **36 surgical procedures including 1 catheter treatment in 34 patients**

though the surgery was highly complicated in all everything went fine and we **expect the closure rate to be more than 90%**

the majority of the patients were **old to very old** with leaking of urine and/or passing stools pv for up to 50 years and probably longer

in **5 patients** this was our **last resort final** approach

our main question is: ??where are the young(er) patients?? do **not** let them wait until they have grown old but repair them now so they can have something from life

when we left there were still **over 200 patients on the waiting list**; so we are prepared to come back

last of all, we were **highly impressed** by all our sponsors and by the staff of the southeast fistula center

when we arrived home in katsina we could look back upon a highly successful effort

# **vvf workshop ebonyi state**

women and children hospital  
southeast fistula center

abakaliki

monday 7th thru tuesday 15th of june 2010

day-to-day report

**monday 7th** of june 2010

abdullahi and kabir left katsina for kano where they picked up kees who had performed 2 operations and 3 catheter treatment and consultation in 20 patients; from kano we proceeded further and after some 650 km in total by toyota jeep we arrived safely in abuja at around 20.30 hr where we checked into the hotel; abdullahi driving all the way from kano to abuja

**tuesday 8th** of june 2010

by air we went to calabar where we were met by the protocol officer of ebonyi state and proceeded by car to abakaliki and booked into our hotel; part of the road was in a terrible condition and we narrowly escaped an accident which would have killed us all if not for the quick reaction of our driver  
in abakaliki we were welcomed by the honourable commissioner of health and delegates from the first lady of ebonyi state

**wednesday 9th** of june 2010

we proceeded to the southeast fistula center in abakaliki, the venue of the activities, at around 8.45 hr (late because of poor/slow breakfast service) and started to work

**six procedures:** sth-cs-vcvf-repair in patient para X with small type **I** cs fistula operated 1x and leaking 6 yr, vvf-repair in patient para I with strange minute fistula type **IIAa** after cs operated 1x and leaking 5 yr, catheterization of traumatized L ureter + repair of mutilated fistula type **IIAa** in patient para VI operated 2x and leaking 28 yr, 3/4 circum repair of fistula type **IIAb**, highly complicated circumferential repair of mutilated multiple fistulas type **IIAb**, repair + bilateral pcf refixation of mutilated extensive fistula type **IIAb** and wardround  
from **8.45 to 18.45 hr**

**thursday 10th** of june 2010

**eight procedures:** catheter treatment of small **necrotic** cs-vcvf type **I** in para leaking 30 days, **vaginal repair** of cs-vesicouterine fistula type **I** with menstruation thru euo, **complicated** repair of mutilated fistula type **IIAb** operated 1x, repair of **ragged** distal rvf type **IIAa** operated 1x, **last resort** repair of large inoperable small fistula type **IIAa** with anorectum/sphincter ani/perineal body repair type **IIB** operated 2x leaking urine/flatus incontinence with ba hanya and menstruating thru anus (cervix opening into rectum) for 10 yr, **last resort** repair + pcf repair/refixation in lungu fistula type **IIAb** operated 1x and leaking 30 yr, **highly complicated** repair of intracervical cs-fistula type **I** with cervix fixed/retracted and wardround  
from **8.15 to 18.30 hr**

**friday 11th** of june 2010

**seven procedures:** closure of rvf fistula type **Ia** with “inoperable” vvf type **IIBb** as second stage, repair of **severely mutilated** fistula type **IIAa** with 1 cm thick scarring operated 1x and leaking for 30 yr, repair of fistula type **IIAb** and reconstruction of **mutilated** sphincter ani rupture etc type **IIB** in patient para VIII (0 alive) operated 1x for rvf and leaking/ stool/flatus incontinence for 48 yr, repair of fistula type **IIAa** after tah-cs operated 1x and leaking 30 yr, repair + transverse pcf repair of fistula type **IIAa** with **b** characteristics never operated and leaking 35 yr, repair of fistula type **IIAa** with poor tissue quality operated 1x and leaking 35 yr  
and wardround

from **8.00 to 18.00 hr**

**saturday 12th** of june 2010

**seven operations:** **last resort** repair rvf type **Ib** with **assessment** of **inoperable** urine fistula type **IIBb** operated 2x and leaking urine/pas sing stools pv with colostomy for 7 yr, complicated repair of fistula type **IIAa** in patient leaking 30 yr, complicated repair of that specific fistula type **IIAa** leaking 12 yr, repair of fistula type **IIAa** in 63 yr old lady para XV who developed her fistula when 15 yr old and then delivered 14 times with this fistula (3 alive) leaking 48 yr and never operated, repair of sth-cs-vcvf type **I** not operated and leaking 30 yr, primary suturing of complicated sth-cs fistula type **I**  
and wardround

from **8.00 to 18.00 hr**

**sunday 13th** of june 2010

**two operations:** circumferential repair + pcf refixation of fistula type **IIAb** never operated and leaking 30 yr, complicated bladder/cervix\_ uterus closure of intravesical cs-vcvf type **I** within mutilated cervix leaking for 11 yr, sphincter ani reconstruction in mutilated fistula type **IIB** + assessment of inoperable urine fistula type **IIBb** with mutilated ba hanya operated 5x including (closure of) colostomy and abdominal repair of vvf leaking urine/stool incontinence for 22 yr, last resort dilatation of mutilated uv-stricture following 2x repair whereby pvw sutured onto avw with ba hanya leaking 30 yr, repair + pcf repair of large 0.2 cm fistula type **IIAa** after delivery I then delivered 14x (3 alive) with this fistula, operated at least 1x and leaking 50 yr, repair of extensive rvf type **Ila** and **last resort** covering of **inoperable** fistula type **IIBb** leaking urine/passing stools pv for 40 yr  
and wardround

from **8.00 to 17.00 hr**

at night we had a debriefing with the honourable commissioner of health

**monday 14th** of june 2010

leaving abakaliki by road to calabar, then we travelled by air to abuja where we stayed for the night after short visit to usaid-acquire headquarters

**tuesday 15th** of june 2010

after another short visit to usai-acquire headquarters we travelled some 550 km back to katsina where we arrived safely  
mun gode Allah

### **remarks**

the **major** problem is that most patients were old to very old and had been leaking urine and/or passing stools pv for up to 50 years and the fistulas were extensive so, most of the surgical procedures were highly complicated to almost impossible; we stuck to the minimum; in 5 patients it has been written down in their operation reports

and in their hospital files: **last resort final** which really means no more surgical intervention

however, with due respect to the elderly ladies who need operations as well where are the young(er) fistula patients who still have their whole life in front of them; do not let them wait until they have grown old

#### **time spent**

a total of **50 hours** on the workshop and **4 days** on travelling; if next time we travel all the way by air this will reduce the travelling to 2 days

#### **conclusion**

it was a fine workshop where **35 operations** and **1 catheter treatment** were performed in 34 patients; it was really worth the exercise

however, when we left there were still **over 200 patients on the waiting list**; and therefore we are prepared to come back to ebonyi state

**kees waaldijk, MD PhD**  
chief consultant fistula surgeon

20th of june 2010

#### **many thanks to**

dr sunday adeoye and dr okoro and all the staff of the **southeast fistula center** in abakaliki for their organization and support

# **vvf workshop sokoto state**

maryam abacha women and children hospital  
sokoto

monday 28th june thru friday 2nd july 2010

## **executive summary**

this hospital is a very important center with an enormous potential which has so far been under-utilized though we have been coming and operating and training doctors here since 1994

over the 16 year period 1994-2010 some 3,000 repair have been performed in over 2,500 patients which is by far not sufficient

this seems to be the ideal workshop: some 25-30 repair in 5 days which means no overload of the hospital and staff and materials; as well it keeps the motivation alive

a total of 24 procedures were performed in 23 patients

this time we made sure there was a sound healthy mixture of young patients with fresh fistulas and old patients with long-standing leaking preventing new ones to be added to and clearing the backlog list as well

the minor problems and the mutilation are not meant to blame anybody but only to state the **reality** which is hard: the conditions are not optimal and obstetric fistula surgery is beyond the reach of inexperienced surgeons though it looks so simple

some 20-30% of the patients are from within sokoto metropolis which is an indication that the obstetric care is below any standard; it has nothing to with rural areas and no roads/no access since there are sufficient hospitals in sokoto; with more discipline in the obstetric units there would and should not be any patient from sokoto metropolis

the training continued for one young doctor from bauchi state

however, a workshop is not a tool for training considering the stress of the workload combined with the complex nature of the obstetric fistulas encountered

when we left there were still many patients left on the long waiting list in this **fistularium**; the longer patients stay the more difficult it becomes to rehabilitate them into taking responsibility for their own lives instead of depending upon others

next time we plan to see all the old patients, examine them under spinal anesthesia and make a clear statement about the surgical possibilities

# **vvf workhosp maryam abacha hospital**

## **sokoto**

### **day-to-day report**

27th june thru 2nd july 2010

**sunday 27th** of may 2010

we left katsina at around 11.00 hr and after some 450 km by toyota jeep we arrived safely in sokoto at around 17.30 hr where we checked into the hospital; abdullahi and kees driving alternately

### **good motivating news**

we were informed that **all our 26 procedures** in 24 patients of may were **successful** including the 4 catheter treatments, the 3 rvf-repairs and the 6 last resort procedures though one patient will need another operation for the second fistula as second stage and one patient was leaking due to postrepair total incontinence grade III so last resort final does not mean hopeless though it means final the patient with jejunovaginal fistula and total intrinsic incontinence had healed completely and came back to greet and thank us

**monday 28th** of may 2010

we proceeded to maryam abacha women and children hospital in sokoto, the venue of the activities, at around 8.00 hr and started to work

**five operations:** early repair at 75 days of type **IIAa** fistula, complicated repair of type **IIAa** yankan gishiri fistula bco ba hanya, circumferential repair of type **IIAb** fistula with ar **neg** and **saddle anesthesia** with **stool/flatus incontinence** due to sacral plexus trauma, continent urethra reconstruction in type **IIBa** yankan guriya fistula and repair of type **Ila** stool fistula; then the hospital generator stopped since no diesel and wardround

from **8.00 to 17.00 hr**

**tuesday 29th** june 2010

**six procedures:** early closure with repair of large transverse pcf trauma/defect at 48 days of type **IIAa** fistula in para VIII (2 alive) with, early closure at 35 days of type **IIAa** fistula in para VI (3 alive) with “**necrotic**” cervix, early closure at 30 days of type **IIAb** urine fistula and anorectum/sphincter ani/perineal body repair of type **IIB** stool fistula in **extensive obstetric trauma**, repair of **mutilated** type **IIBb** fistula operated 2x, catheter treatment of minute post-hysterectomy type **I** fistula at 28 days, and consultation in one patient with advanced bladder ca; then no operation gowns and wardround

from **8.00 to 16.30 hr**

**wednesday 30th** june 2010

**five operations:** bilateral pc fascia fixation for **mutilated** post **IIAb** total intrinsic incontinence operated 2x as last resort, repair of **mutilated** type **IIAa** fistula with **excessive scarring** operated at least 2x, **last resort** distal urethra\_euorhaphy with avw y plasty of post **mutilated IIBb** repair intrinsic incontinence operated 3x, early repair at 56 days of type **IIBb** fistula, circum repair + pcf refixation of type **IIAb** fistula and consultation in 4 patients and wardround

from **8.00 to 16.30 hr**

**thursday 1st july 2010**

**six procedures:** **ps-like** repair of “**inoperable**” type **IIBb** fistula, repair with transverse fascia repair/fixation of type **IIBb** fistula with **b** characteristics, **last resort** euo-rhaphy + para-euo pcf fixation in total post **IIBb** incontinence grade III operated 4x, **complicated** longitudinal closure of **2nd obstetric type I** that specific fistula after cs, catheter treatment at 15 days of total postpartum incontinence **grade III** and consultation in 6 patients; then no more patients prepared for surgery  
and wardround from **8.00 to 16.00 hr**

**friday 2nd july 2010**

**two operations:** **last resort** urethra reconstruction of **mutilated “inoperable”** type **IIBb** fistula operated 2x, **highly complicated** repair of **mutilated** ?tah?-cs type **I** fistula operated 1x  
and wardround from **8.00 to 11.00 hr**  
traveling same 450 km back to katsina where we arrived safely mun gode Allah

### **remarks**

it looks so simple but learning a trick is not sufficient since it takes a life time of hard intensive study to master the **art & science of obstetric fistula surgery**

### **time spent**

a total of **36 hours** on the workshop and **11-12 hours** on travelling during 6 full days

### **conclusion**

it was a fine workshop where **23 operations** and **1 catheter treatment** were performed in 23 patients

**kees waaldijk, MD PhD**  
chief consultant fistula surgeon

5th of july 2010

**many thanks to**

all the staff of the **maryam abacha hospital** for their continuing support

# **vvf workshop sokoto state**

maryam abacha women and children hospital  
sokoto

monday 1st thru friday 5th november 2010

## **executive summary**

this hospital is a very important center with an enormous potential which has so far been under-utilized though we have been coming and operating and training doctors here since 1994

a total of **27 procedures** were performed in **25 patients** whilst 3 patients were referred to katsina since the fistula was too complicated to handle here

dr kabiru abubakar from kano participated actively in this workshop as facilitator and we were accompanied by 3 trainees

we made sure there was a sound healthy mixture of young patients with fresh fistulas and old patients with long-standing leaking preventing new ones to be added to and clearing the backlog list as well

the minor problems and the mutilation are not meant to blame anybody but only to state the reality which is hard: the conditions are not optimal and obstetric fistula surgery is beyond the reach of inexperienced surgeons though it looks so simple

when we left there were still many patients left on the long waiting list in this fistularium; the longer patients stay the more difficult it becomes to rehabilitate them into taking responsibility for their own lives instead of depending upon others

it is a pity that the major aid organizations are not interested to really support high-quality performance in this center; unfortunately they are only after numbers and data

this center is far too important to maintain the status quo

# **vvf workhosp maryam abacha hospital**

sokoto

## **day-to-day report**

1st thru 5th november 2010

**sunday 31st** of october 2010

we left katsina at around 11.00 hr and after some 450 km by toyota jeep we arrived safely in sokoto at around 16.30 hr where we checked into the hotel; we had to make a full stop 3 times to avoid head-on collision with on-coming cars on the wrong side of the road

### **good motivating news**

we were informed that **all our 24 procedures** in 23 patients of june were **successful** including the 1 catheter treatment

**monday 1st** of november 2010

we proceeded to maryam abacha women and children hospital in sokoto, the venue of the activities, at around 8.00 hr and started to work

**five procedures:** highly complicated early repair at 36 days of large type **IIAa** fistula, step-by-step teaching of circumferential repair of large type **IIAb** fistula, 3/4 circumferential + **ps-like** repair of type **IIAb** fistula with extensive obstetric trauma, longitudinal closure of cs fistula type **I** and catheter treatment for total urine intrinsic incontinence as healing phase of atonic bladder and wardround

from **8.00 to 16.30 hr**

**tuesday 2nd** of november 2010

**five procedures:** early **ps-like** closure of cs\_sth\_vcvf type **I**, urethralization by pc fascia refixation of total post **IIAb** incontinence, repair of post stone removal type **IIAa** fistula, **complicated** repair of type **IIAa** fistula, early **ps-like** closure of cs\_sth\_vcvf type **I** (**clustering** with first operation) whilst 3 patients were referred to katsina since it was too difficult to handle them here and wardround

from **8.00 to 16.30 hr**

**wednesday 3th** of november 2010

**six procedures:** continent urethra/fascia/avw reconstruction in severely mutilated yankan gishiri type **IIBa** fistula operated 2x, repair of yankan gishiri type **IIAa** fistula with longitudinal **contracted** scar, **step-by-step teaching** of circumferential repair in type **IIAb** fistula, removal of two bladder stones with repair of cs-tah type **I** fistula and disruption of rectum stricture in type **Ib** rvf, early longitudinal repair of type **I** fistula not healed by catheter for 4 wk and wardround

from **8.00 to 16.30 hr**

**thursday 4th** of november 2010

**eight procedures:** early repair of extensive type **IIAb** or **IIBb** fistula with extensive obstetric trauma, repair of minute type **I** fistula operated 2x (the usual), **last resort final** urethralization etc of post extensive **IIAb** total intrinsic incontinence, repair of repeat second obstetric type **IIAb** fistula, repair of type **IIAa** fistula, repair of type **IIAb** fistula, repair of type **IIAb** fistula and repair of type **IIAa** fistula and wardround

from **8.00 to 16.30 hr**

**friday 5th** of november 2010

**three procedures:** early circumferential repair of large type **IIAb** fistula with **ps-like** closure of proximal type **Ia** rvf in total circumferential extensive trauma (**punched out foramina obturatoria**) and repair of type **IIAa** fistula and wardround from **8.00 to 10.00 hr**  
traveling same 450 km back to katsina where we arrived safely mun gode Allah

**remarks**

obstetric fistula surgery is not for inexperienced surgeons since it takes a life time of hard intensive study to master the **art & science of obstetric fistula surgery**

**time spent**

a total of **36 hours** on the workshop and **11-12 hours** on travelling during 6 full days

**conclusion**

it was a fine workshop where **26 operations** and **1 catheter treatment** were performed in 25 patients

**kees waaldijk, MD PhD**  
chief consultant fistula surgeon

10th of november 2010

**many thanks to**

all the staff of the **maryam abacha hospital** for their continuing support  
dr kabiru abubakar to actively participate in the surgery of 5 patients and as facilitator

# **fourth vvf workshop for yobe state**

federal medical center nguru

10th thru 12th of november 2010

## **executive summary**

this workshop was the **fourth** in a series of more in order to establish a functioning vvf-repair service for yobe state; all in line with the national vvf masterplan that each state should have its own vvf-repair center to bring the service towards the patients

the workshop itself was fine where a total of 23 state-of-the-art operations and 3 catheter treatments were performed in 24 patients whilst 1 patient was classified as inoperable; another 3 patients were placed on bladder drill and 2 patients were not cooperative for operation

we examined, operated and/or consulted all the patients by the end of this workshop

# fourth vvf workshop for yobe state

## federal medical center nguru

9th thru 12th of november 2010

### day-to-day report

#### introduction

we returned to nguru to collaborate in order to set up a regular vvf service; all in line with the national vvf masterplan that each state should have its own vvf-repair center

#### day-to-day report of the workshop

##### tuesday 9th november 2010

travelling from Kano to Nguru, having performed 3 repairs in laure fistula center in kano, some 250 km

##### wednesday 10th november 2010

surgery **six** procedures: repair of type **I** fistula in para-IX leaking 35 yr without operation, repair of type **I** fistula in para-IX leaking 7 yr, early closure of type **IIAa** fistula in para-I which would have been healed by immediate catheterization, 4/5 circumferential repair of **mutilated** type **IIAb** fistula in para-I **highly complicated** repair of type **I** fistula fixed to i spine L in para-I, repair of type **IIAa** fistula in para-I

wardround from 8.00 to 18.00 hr

##### thursday 11th november 2010

surgery **six** procedures: bilateral ureter catheterization + 4/5 circumferential repair of extensive type **IIAb** fistula in para-III, repair of type **I** tah-vvf, 4/5 circumferential repair of **severely mutilated extensive** type **IIAb** fistula operated 2x, **final last resort** "continent" urethra reconstruction of "inoperable" type **IIBb** fistula operated 3x, **last resort final** longitudinal "repair" of **severely mutilated extensive** type **IIBb** fistula operated 2x, "repair" of type **IIAb** lungu fistula operated 3x

wardround from 8.00 to 18.30 hr

##### friday 12th november 2010

surgery urethra reconstruction of yankan hantsaki type **IIBa** fistula bco itching, **last resort final** "continent" urethra reconstruction of type **IIBb** operated 7x, **nontypical** 4/5 circumferential repair of **extensive** type **IIAb** fistula with **total cervix loss**/uterus fixed to i spine L,

after the wardround we proceeded on our trip back to katsina via kano over some 700km

a **total of 34 hours** were spent during this workshop on surgery and wardrounds and another **12 hours** on traveling

### **conclusion**

it was a fine workshop as third step to have a functioning vvf center in yobe state where a total of 23 state-of-the-art operations and 3 catheter treatments were performed in 24 patients whilst 1 patient was classified as inoperable IIBb another 3 patients were placed on bladder drill and 2 patients were not cooperative for operation

**kees waaldijk** MD PhD  
chief consultant fistula surgeon

15th of november 2010

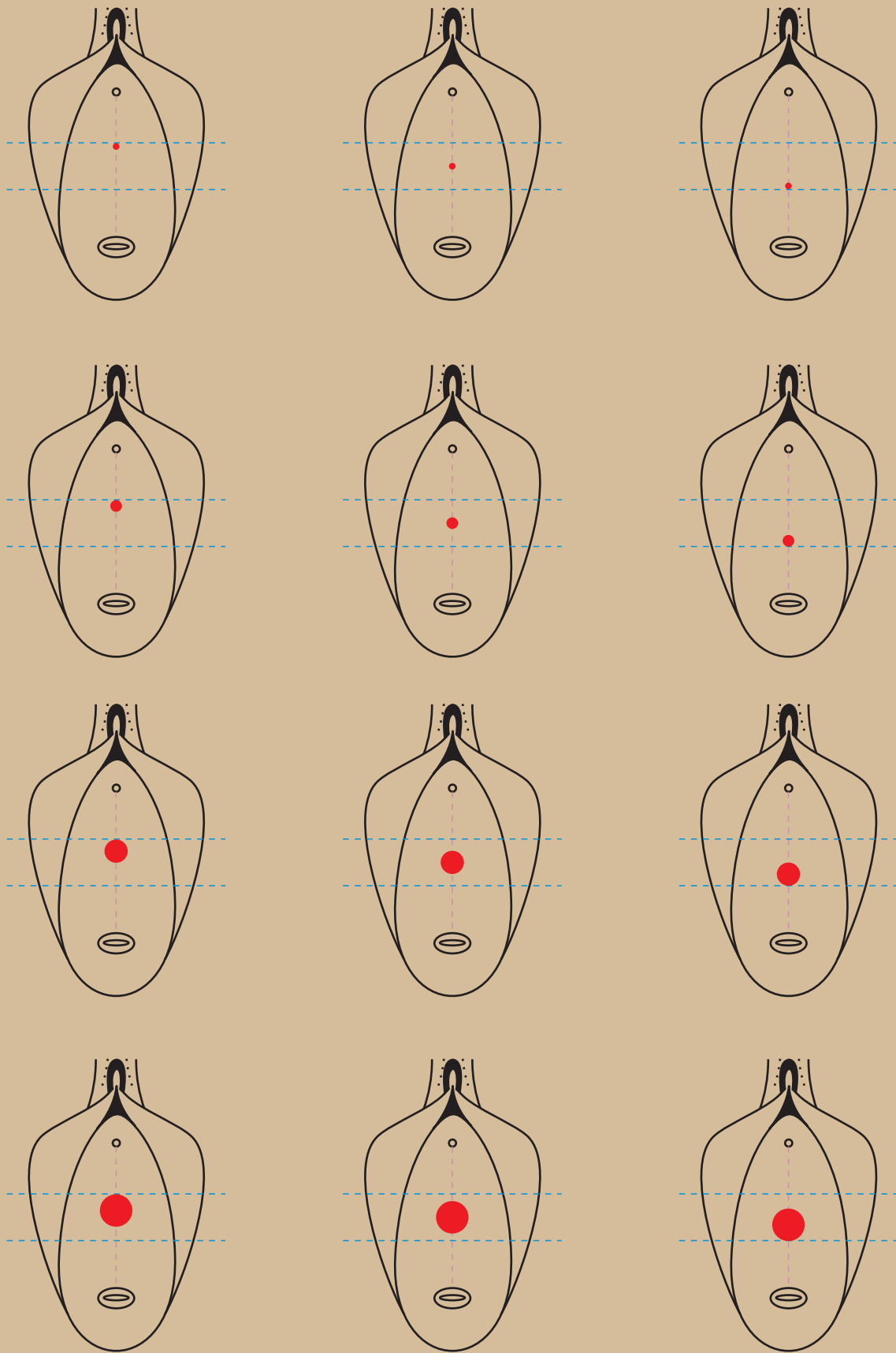
### **many thanks** to:

dr bala, dr mohammed b kawuwa, dr a a kullima, alhaji hassan z tagali and mrs yemisi e ojo for their dedication/commitment/organization and to the management and all the staff of **federal medical center nguru** for their support

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fistulas for beginner